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ACCOUNTING, REPORTS TO STOCK-HOLDERS, AND THE SEC

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THIS paper is exploratory. Two jobs—both focused upon the adequacy and reliability of corporate accounting reports to stockholders—are attempted: first, to point out the serious gap in the regulation of accounting reports to stockholders under the Securities Exchange Act, especially as it is reflected in seventy selected corporate balance sheets and income statements for 1937; second, to discuss a number of the limitations inherent in the accounting material made available to investors: limitations which may indicate the deceptiveness of such current catchwords as "truth in securities" and "full disclosure." These objectives make it necessary to discuss the categories and classifications upon which the accountant rears an apparently precise and certain structure.

A vigorous legal literature in the past two or three decades has made lawyers aware of the very general nature of many legal categories or rules, and their necessarily varying nature in changing environments. A similar development has not yet taken place in the field of accounting, at least not to the same extent. Many of the accountant's most important categories—"income," "cost," "fixed assets"—and the criteria used in allocating particular items into one category or another—"extraordinary," "maintain," "current"—are as broad and permit as much discretion as legal rules. But one can find only occa-

sional appreciation of this fact in an accounting literature largely preoccupied with existing techniques and repolishing of definitions.

This paper undertakes to break additional ground in the inevitably forthcoming critical analysis of accounting categories and accounting concepts.¹ Little excuse is needed for undertaking this task. The Transamerica, Associated Gas and Electric, and Missouri Pacific Railroad delisting proceedings, and the McKesson-Robbins auditing investigation indicate that, to a considerable extent, the fight for protection of the interests of investors and public regulation of corporate enterprise has shifted to the accounting front.²

Despite the Securities Act and the Securities Exchange Act, corporate reports to stockholders remain unregulated to any

¹ Hamilton and Till, *The Cost Formula for Price* (March 1, 1935) N.R.A. Consumers Division, Rep. No. 9, partially reprinted as "Cost as a Standard for Price" (1937) 4 *Law and Contemp. Prob.* 321, is, undoubtedly, the outstanding piece of critical writing on accounting. Bonright, *Valuation of Property* (1937) contains many passages subjecting accounting to the functional approach. Of professional accountants, George O. May, senior partner of Price, Waterhouse & Company, seems most aware of the purposive nature of his techniques. See his *Dickinson Foundation Lectures, Harvard Graduate School of Business Administration*, reprinted in (1937) 63 *J. of Accty.* 333 and *Eating Peas with Your Knife* (1937) 63 *J. of Accty.* 15.

² In the Matter of: Missouri Pacific Railroad Company (Feb. 15, 1938) Sec. Exch. Act Release No. 1586; Transamerica Corporation (Nov. 25, 1938) Sec. Exch. Act Release No. 1950; Associated Gas and Electric Company (Jan. 13, 1939) Sec. Exch. Act Release No. 1985; McKesson & Robbins, Inc. (Dec. 30, 1938) Sec. Exch. Act Release No. 1975.

effective degree.³ The Securities Act does not embrace securities already issued, or subsequent dealings in securities issued in compliance with its provisions. The original scope of the Act did not contemplate periodical supplemental reports after the securities were already in the hands of the public.⁴ Obviously, information supplied in a prospectus for the new issues becomes misleading and unreliable in a relatively short time.

To remedy these apparent deficiencies, among others, the Securities Exchange Act of 1934 was enacted.⁵ The objectives of the Act, in this respect, as later expressed by the Commission, were:

". . . to make available to the average investor honest and reliable information sufficiently complete to acquaint him with the current business condition of the company, the securities of which he may desire to buy or sell."⁶

In Congress, the publicity features of the Exchange Act were particularly emphasized, and apparently the Act was regarded as providing sanctions which would result in the disclosure of corporate information to investors, existing and prospective, in securities already in the hands of the public and thus beyond the reach of the Securities Act.⁷

Unfortunately, the Exchange Act does not require that corporations follow Commission standards in their annual reports

³ Some state corporation statutes contain accounting and reporting requirements. See the study by American Institute of Accountants of several state incorporation laws, cited in Payne, "The Effect of Recent Laws on Accountancy (1935), 10 *ACCOUNTING REVIEW* 84, 87 *et seq.*

⁴ Section 15(d) of the Exchange Act, as amended in 1936, requires under certain conditions, an undertaking by the issuer of new securities under the Securities Act, to file the supplemental and periodic information required of persons with securities listed and registered upon a national securities exchange.

⁵ See, generally, Hanna, "The Securities Exchange Act as Supplementary of the Securities Act" (1937), 4 *Law and Contemp. Prob.* 256-68.

⁶ Securities and Exchange Commission, Second Annual Report (1936) 2.

⁷ H. R. Rep. No. 1383, 73d Cong. 2d Sess. (1934) 11-13.

to stockholders.⁸ The Act applies only to corporations with securities listed on national securities exchanges and requires such corporations to file with the Commission and with the exchange annual reports which comply with the standards imposed by the Commission and the exchange.⁹

Reports filed with the Commission, except where regarded as confidential, are available in Washington to the public either by personal examination¹⁰ or by paying the cost of duplication.¹¹ Except for institutional or other substantial investors, who before the Exchange Act often managed to get the information anyway,¹² such cost is likely to be prohibitive, and the effort to obtain it is so great that only the most energetic investor will bestir himself. Under a rule of the Commission, the national securities exchanges are required to keep the registration statements and periodic reports of issuers open for public inspection.¹³ This rule enables investors and investment analysts in cities where the exchanges are located to secure the information by examination. These are the only *official* sources and sanctions by which corporate information is made available to the investing public. In other non-official ways, perhaps a fairly large

⁸ Sections 14 and 6, governing the solicitation of proxies and registered exchanges, respectively, provide a possible statutory basis for the promulgation of rules regulating the form and content of corporate reports to stockholders.

⁹ See sec. 13(a) of the Securities Exchange Act of 1934.

¹⁰ Securities Exchange Act of 1934, sec. 24(b).

¹¹ "10 cents per photostatic copy of each page, for all copies up to and including 100 in a single order; 7 cents per photostatic copy of each page, for all copies over 100 in a single order." Securities Act Regulations, Rule 121(a).

¹² The Fourth Annual Report of the Securities and Exchange Commission for the fiscal year ended June 30, 1938, states that approximately 24,000 members of the public visited the Washington, New York, and Chicago Public Reference Rooms of the Commission "seeking registered public information, forms, releases, and other material." The Commission filled more than 3,500 orders for photocopies of material. Pp. 93-94.

¹³ Exchange Act Regulations, Rule X-24B-3.

quantity of general information manages to trickle down into investor's hands. In instances where the Commission summarizes the reports in a press release, the financial sections of the daily or financial newspapers may publish the summary in a digested form.¹⁴ More important, a large percentage of investors rely upon the advice of investment services which presumably scrutinize and evaluate these reports with care. And perhaps more important still, brokers, large-scale and institutional investors do obtain the information filed, and their judgment on the value of the security, presumably reflected in its market price, affords the ordinary investor some protection.

Thus reports to stockholders, unsupervised under the present rules of the Commission, remain the stockholders' most important source of corporate information.¹⁵ A study of balance sheets and income statements appearing in the 1930 and 1937 published reports of seventy large corporations, herein presented, indicates that, despite a marked improvement since 1930, such reports fall considerably below the accounting standards which these same corporations are required to meet in their reports to the SEC and to the exchange on which their securities are registered.¹⁶ The results of this study are

¹⁴ Even this as a practical matter is of little use to the investor, since it is too summary an account—being a digest of a digest—and also, since most people discard their daily papers, it is unavailable when the investor wants it.

¹⁵ Nonvoting investors in the business—bondholders, nonvoting preferred, etc.—by a strange convention are not considered to be entitled to a yearly accounting from the custodians of their funds. See, however, secs. 313 and 314 of the Trust Indenture Act of 1939. Reports to stockholders, usually available on request without charge, or newspaper or financial-chronicle digests of and comments on that report, are probably the nonvoting investors' principal source of information.

¹⁶ The method followed in making the study was to select items in income statements and balance sheets which accounting authorities, investment analysts, and the Commission in its forms and regulations under both the Securities Act and the Exchange Act regard as significant in reflecting the corporation's business condition and progress, and to note the num-

ber of corporations in 1930 as compared with 1937 which furnished information in regard to each item. While this method does not present a complete picture of the extent of the information supplied by any specific corporation, it does indicate in a general way what the 70 corporations chose to reveal on specific items. The aggregation of these items and the number of corporations disclosing each, reflect, it is believed, in a rough measure, the extent of the financial information given to stockholders in the years selected. 1930—prior to the Securities Act—was selected rather arbitrarily as the year with which to contrast 1937. The 70 corporations, chosen because of their national scope and because their financial statements were available in the Yale University Library, are believed to represent a rather fair sampling of the 500 or 600 largest nonutility, non-railroad corporations in the United States. Presumably the larger corporations furnish more information to stockholders than smaller ones. If this assumption is true, this study is weighted toward greater disclosure.

The following is a list of the corporations studied: National Biscuit Co.; Quaker Oats Co.; American Sugar Refining Co.; Holly Sugar Corp.; Liggett & Myers Tobacco Co.; R. J. Reynolds Tobacco Co.; Firestone Tire & Rubber Co.; United States Rubber Co.; International Salt Co.; Armour & Co. (Illinois); J. I. Case Co.; Deere and Co.; International Harvester Co.; Allegheny Steel Co.; Bethlehem Steel Corp.; United States Steel Corp.; Federal Mining & Smelting Co.; Old Dominion Co. (Liquidating); Pittsburgh Coal Co. (of Pa.); Columbia Oil and Gasoline Corp.; Standard Oil Co. of Ohio; The Barber Co., Inc.; Johns-Manville Corp.; National Lead Co.; American Window Glass Co.; Owens-Illinois Glass Co.; Air Reduction Co., Inc.; Allied Chemical & Dye Corp.; Union Carbide & Carbon Corp.; Virginia-Carolina Chemical Corp.; Atlas Powder Co.; Lehr and Fink Products Corp.; Parke, Davis & Co.; General Electric Co.; American Type Founders, Inc.; Baldwin Locomotive Works; Crane Co. of Chicago; The Fairbanks Co.; International Business Machines Corp.; Lima Locomotive Works, Inc.; Midvale Co.; National Cash Register Co.; Remington Rand, Inc.; United Shoe Machinery Corp.; Chrysler Corp.; General Motors Corp.; Packard Motor Car Co.; Reo Motor Car Co.; Studebaker Corporation; E. I. Du Pont de Nemours & Co.; Hercules Powder Co.; Remington Arms Co.; American Chain and Cable Co.; Torkington Co.; Container Corp. of America; American Woolen Co.; Gotham Silk Hosiery Co., Inc.; Julius Kayser and Co.; A. G. Spalding & Bros.; Eastman Kodak Co.; Curtis Publishing Co.; Colgate-Palmolive-Peet Co.; Procter & Gamble Co.; Warner Bros. Pictures, Inc.; Kaufmann Department Stores, Inc.; S. H. Kress & Co.; May Department Stores Co.; J. C. Penney Co.; Sears, Roebuck and Co.; American Stores Co.

INCOME STATEMENTS

The balance sheet is a highly technical document, as will be seen later, of relatively small value to those who buy or sell securities. It does not purport to give an investor *present values*; it merely reports

that portion of historical and current disbursements which remain, after depreciation, obsolescence, depletion, and amortization have been charged periodically to the fiscal periods in which the capital assets are assumed to have been consumed. Accountants and investment analysts today are agreed that the income statement is much more significant and informative to the investor than the balance sheet.¹⁷ It is of cardinal importance, because the "value" of a business depends, not on the historical costs incurred in the process of building it up, but upon its earning capacity.¹⁸

In the not so distant past, many corporations omitted the income statement completely, but protests in accounting and economic literature, pressures from the New York Stock Exchange and the Securities Acts, have forced more and more corporations to disclose information on their current operations. Of the 70 corporations studied, three did not include any income statement in their annual reports to stockholders in 1937,¹⁹ and the

¹⁷ This statement will not hold for banks finance companies, or, possibly, public utilities.

The history of the recent shift in emphasis of investment analysts from the net worth of a business to the earning capacity is discussed in Graham and Dodd, *Security Analysis* (1934) 299-313. While current literature emphasizes the importance of the income statement, most writers continue to devote a disproportionate amount of attention to balance sheets in their written treatments of the subject. See for example, the Report of the American Institute of Accountants on Cooperation with Stock Exchanges, *Reports to Stockholders* (1932).

¹⁸ The writers do not mean to suggest that the balance sheet can be ignored safely by investors. The results of current operations can be appraised best in light of the financial resources of the company to maintain those operations and to weather adverse business conditions. In addition, the balance sheet sheds light on the questions of claims against the corporation and the relative priorities of the different classes of securities. The use of both net worth and earnings gives an investor an additional test of attractiveness rather than a single one of earnings alone. See Graham and Dodd, *Security Analysis* (1934) 350 *et seq.*

¹⁹ Curtis Publishing Co.; Torrington Co.; and United Shoe Machinery Co. A study of 1934 published annual reports indicated that 2½% of the corporations studied omitted income statements. Sunley, "Seen in Published Financial Statements" (1935) 15 *C.P.A.* 682.

income statements of at least 17 of the corporations are considered by the writers to be totally inadequate.²⁰ In 1930, four corporations omitted income statements and the statements of at least 34 were inadequate. Although in both years, there was a striking lack of uniformity as to form and content, 1937 showed some improvement in this respect.²¹

As with all generic words, the abstraction "income," which the accountant uses with an appearance of certitude, acquires meaning only in a particular setting and in connection with a particular purpose. "Income" for the economist, "income" under income tax laws, "income" in the determination of national income, "income" to determine the relative rights of remaindermen and life-tenants in property held in trust, and "income" to the accountant for a partnership and for a corporation all vary enormously; within each field the word acquires different shadings and permutations, with changing emphases.²² The contrast between the economist's point of view and the accountant's is particularly significant, especially since, with important social consequences, the accountant's viewpoint has dominated industrial life.²³ The economist regards

²⁰ Of the 70 studied the 1937 income statements of the following corporations are obviously inadequate: Allied Chemical & Dye Corp.; American Sugar Refining Co.; American Window Glass Co.; The Barber Co., Inc.; The Fairbanks Co.; J. I. Case Co.; Liggett & Myers Tobacco Co.; Lima Locomotive Works, Inc.; Midvale Co.; National Biscuit Co.; National Cash Register Co.; Old Dominion Company; Quaker Oats Company; R. J. Reynolds Tobacco Co.; Remington Arms Co.; Studebaker Corporation; Union Carbide and Carbon Corp.

²¹ See Stockwell, *How to Read a Profit and Loss Statement* (1927) 4.

²² For a discussion of variations in the purpose of the corporate income statement and the consequences of such variations see Hatfield, *Accounting* (1927) 380-2. See, also, Canning, *The Economics of Accountancy* (1929) 92-4; Kimball, "The Importance of Understanding Income and Profits" (1935) 10 *ACCOUNTING REVIEW* 131-5; Crandall, "Income and Its Measurement" (1935) 10 *ACCOUNTING REVIEW* 380-400; Paton, *Accountants' Handbook* (1935) 1075-8; Littleton, "Concepts of Income Underlying Accounting" (1937) 12 *ACCOUNTING REVIEW* 13-22.

²³ ". . . The nineteenth century carried to extra-

"income" interest four factors capital counts "profit" and re-enterprise flowing "income" counts paid, expenses, constantly down—desiderata and in the

gant length "the final any country active sort of p of using resources tenth c and adv of priva would, travagan financial how the can imp mind is countan (1933) 2 Till, sup standing REVIEW

²⁰ Some constituents its legal "Taxes Rev. 103

²¹ See accountants' mist in or an in account the own property all of w be, usua ing from ables t spawne human

"income" as the distributive rent, wages, interest, and profits accruing to each of the four factors of production—land, labor, capital, and the entrepreneur.²⁴ The accountant focuses his attention upon "profits" alone, as reflected in the costs and revenues of a particular business enterprise, from the viewpoint of its entrepreneur. Wages, rents, and interest flowing from a business enterprise are "income" to the economist, but the accountant considers them, when actually paid, as "costs of production" and "expenses." The "efficient business" constantly strives to keep these "expenses" down—"profit" is regarded as the sole desideratum of business enterprise. Cost and income recordation are, thus, designed in the interests of the businessman.²⁵

The accountant's function in a business enterprise is the rather narrow one of reflecting the interest of the owners and management.²⁶ In preparing the income statement, the accountant devotes himself to determining the portion of historical and current disbursements and receipts which should be allocated to the current fiscal period, when "expenses" are "incurred," and when "revenue" is to be "recognized." Judgment and discretion play a tremendous role. No accounting omniscient can with assurance say what charges should have been made for depreciation, depletion, amortization, and obsolescence during a particular year, what amounts should be provided for doubtful accounts, whether a borderline charge or disbursement is to be handled as an expense of the current fiscal period, a charge to surplus, or whether it is assignable to future income and consequently handled as an asset or deferred expense account, and what extraordinary gains or losses should be credited or charged to income, to assets, or to surplus accounts. A large degree of discretion is present in the choice of the various available and sanctioned methods of computing depreciation²⁷ or stating inventories.²⁸ Income for the year will vary sharply with the method selected.

The extent of the judgment factor in accountancy is not widely appreciated by investors—statistics and figures inevitably lend an air of mathematical certainty. It is fundamental, in the understanding of

gant lengths the criterion of what one can call for short 'the financial results,' as a test of the advisability of any course of action sponsored by private or by collective action. The whole conduct of life was made into a sort of parody of an accountant's nightmare. Instead of using their vastly increased material and technical resources to build a wonder city, the men of the nineteenth century built slums; and they thought it right and advisable to build slums because slums on the test of private enterprise, 'paid,' whereas, the wonder city would, they thought, have been an act of foolish extravagance, which would, in the imbecile idiom of the financial fashion, have 'mortgaged the future'—though how the construction to-day of great and glorious works can impoverish the future, no man can see until his mind is beset by false analogies from an irrelevant accountancy . . ." Keynes, "National Self-sufficiency" (1933) 22 *Yale Rev.* 755, 763. See also Hamilton and Till, *supra* note 1; Kimball, "The Importance of Understanding Income and Profits" (1935) 10 *ACCOUNTING REVIEW* 131-5.

²⁴ Some economists have contended that government constitutes a fifth factor in production—with taxes as its legitimate share in distribution. See Wasserman, "Taxes as a Share in Distribution" (1938) 28 *Am. Econ. Rev.* 103.

²⁵ See Hamilton and Till, *supra* note 1, at 26-27. The accountant excludes psychical income which the economist includes; income to the accountant must be cash or an immediate, readily obtainable claim to cash. The accountant excludes economic costs such as salaries of the owners in individual proprietorships, rent on owned property, interest on capital invested by the owners, all of which are contained in his net profit figure, since he, usually, is interested only in recording costs resulting from explicit transactions. This limited interest enables the accountant to ignore some economic costs spawned by modern industry—waste of natural and human resources, etc. Despite these significant distinc-

tions, it does not seem to be widely appreciated that accounting values are but one phase of economic values.

²⁶ Some accountants have urged that the accountant is not confined necessarily to this parochial niche in the economic life of a nation, and that he can widen the scope of his work to reflect broader economic values. See Borth and Winakor, "Some Reflections on the Scope of Auditing" (1935) 10 *ACCOUNTING REVIEW* 174.

²⁷ See Report of Committee of American Institute of Accountants on Coöperation with Stock Exchanges, Reports to Stockholders (1932) 6. See the discussion on depreciation, *infra* p. 217 *et seq.*

²⁸ See the discussion on inventories, *infra* p. 217 *et seq.*

income accounts and balance sheets as well, to appreciate that the figures appearing in the annual reports of corporations "are largely the reflection of individual judgments"²⁹ and the judgments of other men, equally honest and competent, surveying the same economic phenomena, would have differed—perhaps sharply.³⁰

Divisions of the Income Statement. To present a reasonably informative picture of the activities, and sources of income and character of expenses of a corporation, total figures must be broken down into categories which describe broadly the business of the corporation for the year, and which furnish an investor some basis for analyzing the business and for intelligently forecasting future developments. According to the conventions of present day practice, such a segregation is obtained best by the rather arbitrary division of the income statement into the classical operating, non-operating, and non-recurring subdivisions.³¹

Most accountants agree that the first major division of the income statement, the operating section, should disclose the net sales and revenues, and the expenses resulting from and attributable thereto. Within this section, it is necessary, from

²⁹ Report, *op. cit. supra* note 27, at 6-7. Many of the leading accountants share this view. See May, "The Accountant and the Investor" in *Northwestern University, Ethical Problems of Modern Accountancy* (1933) 26; "American Institute of American Society, Joint Report to the Securities and Exchange Commission on Forms A-2 and 10" (1935) 15 C.P.A. 107, 111; and Sanders, "What Is Most Satisfactory Form of Reports to Stockholders?" (1935) 3 *The Controller* 162, 163.

³⁰ See Editorial, "Three Decades of Profit" (Dec. 17, 1938) 133 *The London Economist* 584.

³¹ The Tentative Statement of the American Accounting Association apparently divides the income statement into operating and non-operating sections, but its terminology would be far more descriptive if the divisions were called "recurring" and "non-recurring" income. "American Accounting Association, A Tentative Statement of Accounting Principles Affecting Corporate Reports, Postulate 9, 10, and 11" (1936) 11 ACCOUNTING REVIEW 187, 189. Professors Sanders, Hatfield, and Moore, in *A Statement of Accounting Principles* (1938) 28-44, follow a similar classification. They do suggest, however, that in the operating section further subdivision is sometimes necessary. *Id.* at 28.

the investors' viewpoint, that the major sources of operating income and the applicable expenses be itemized. The Securities and Exchange Commission has divided the operating section, roughly speaking, into income from the sale of goods, and income from the sale of services; each must be disclosed separately where the lesser amount is 10% or more of the sum of the two items. No further subdivision of the "gross sales less discount . . ." figure is required other than a separate listing, where practicable, of sales to parents and subsidiaries.³²

While the segregation of "goods" and "services" is of some benefit, it places sole emphasis on the distinction between them and ignores other possible breakdowns of the gross figure which may be much more significant to a stockholder. Furthermore, relatively few nonutility, nonrailroad corporations receive as high as 10% of their total income from the sale of services. Investors are not so much interested in whether income comes from the sale of goods or from the sale of services, as they are in knowing from *what goods and what services* the income is derived. For instance, in the income statement of General Motors, it would be far more important for investors to know the percentage of the gross revenue derived from the sale of each line of cars, the percentage derived from the sale of Frigidaires, and from the corporation's other major activities than to know that a certain amount was derived from the sale of "goods" and the remainder from the operation of a railroad. In large corporations, with many diversified types of activity, the disclosure of net

³² The SEC in Form 10-K requires the segregation of sales (and operating revenues if they equal 10% of the sum of the two items), dividends, interest, profits arising from transactions in securities, and separate listing of "any substantial nonrecurring items of miscellaneous other income, and any other substantial amounts." Form 10-K, Instructions, pp. 20-21. Forms A-1, A-2, and 10 are similar.

sales and operating revenues, cost of goods and services sold, and net operating income in total figures is not particularly enlightening to the investor. In fact, the larger the corporation and the more activities it engages in, the less significant gross revenue figures will be to an investor or investment analyst for purposes of forecasting.³⁵ Segregation within these items is necessary for intelligent forecasting and evaluation.³⁶

The second division, nonoperating income,³⁵ usually includes the amounts received from interest, dividends, commissions and fees, rents, royalties, etc., which, while normally recurring, do not arise from the corporation's operations. This disclosure is significant to the investor in that it apprises him more fully of the relative importance of the operating and financial income of the enterprise. Of course, the amount of detail will and should vary somewhat with the nature of the business.

The third major breakdown of the income statement is called by the accountant "nonrecurring" income.³⁸ The accountant uses this term to categorize busi-

ness events which are not conceived to be a part of the "normal" operations of the business, e.g., profits and losses from the sale of fixed assets or portfolio securities, abandonment of property, fire and flood losses, etc. Frequently, these items are attributed directly to some surplus account and hence never appear in the income statement at all. The concern here, however, is not with the problem of credits or debits to income versus credits or debits to surplus³⁷ but with methods of reflecting the item involved after the decision to allocate it to income has been made. The purpose of segregating "nonrecurring" income from other income is to reveal to the investor specific income items which "normally" may not be expected to recur in each major accounting period. Clearly, the inclusion of sizeable, sporadic items with "regularly recurring" income would present a misleading picture of the return to be anticipated from the enterprise. Sales of assets, a major item in this category, occur constantly in large businesses, however, and it is somewhat misleading to label them without discrimination as "nonrecurring," thus asking the investor to discount their presence in the income statement.

From the investor's viewpoint, the test should be whether submerging the transaction in some other item, "sales," or "other operating income," will distort his evaluation of the company's operations and future prospects of income.

Itemization within these major categories of income is an essential minimum of income disclosure. An investor is not interested merely in learning the total earnings for the current year which an indivisible total gives him; his primary interest in earnings is based, to a large extent, on the ability it gives him to forecast the future. Total figures must be broken down to enable him to obtain some

³⁵ The reports examined were definitely deficient in this respect:

ITEMIZATION OF OPERATING REVENUE

	Number of Companies	
Operating Revenue Section:	1930	1937
One Figure.....	34	48
Some Segregation.....	3	6
Minor Sources Segregated.....	3	6

³⁶ This problem has been considered by the Securities and Exchange Commission. See Address of Harold H. Neff, Director, Forms and Regulations Division, entitled "Revision of the Rules Affecting Registration under the Securities Act and the Securities Exchange Act," delivered before the Controllers Institute of America on January 19, 1939.

³⁷ "The distinction . . . between operating and nonoperating income is . . . always a relative one and will be determined in any given instance on the basis of major activities and supplementary or minor activities." 1 Kester, *Accounting Theory and Practice* (3d ed. 1930) 46.

³⁸ As remarked in note 31, *supra*, many accountants use the term "nonoperating" income to include the items here classified as non-recurring. See Paton, *Accountants' Handbook* (1934) 1093. For a discussion and illustration of the importance of segregating nonrecurring items, see Graham and Dodd, *Security Analysis* (1934) 353 *et seq.* See also Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 27.

³⁷ See *infra*.

information as to the sources of past income in order that his guess as to the future, precarious at best, is something more than a wild shot in the dark.³⁸

This discussion has accepted the classical segregations of the income account, and has been concerned with a criticism of its internal constructions. The classical division is not, however, inevitable or exclusive. Income statements of the future may use other starting points or a number of alternative starting points varying with the purpose at hand to describe functionally the phenomena encountered by the business enterprise.³⁹ Much hard work and critical thinking remain to be done on these accounting classifications.

Gross Revenue from Sales and Services. In modern accounting practice, the generally accepted view is that revenue is realized by a valid and enforceable sale.⁴⁰ The sale may be for cash, other valuable consideration, or for a legal claim, e.g., note or account receivable.⁴¹ The sale is

³⁸ See Graham and Dodd, *Security Analysis* (1934) 478 *et seq.* for a discussion, with illustrative case histories, of the importance of segregating sources of income.

³⁹ It has been suggested, for example, that the income statement be reclassified on the basis of "controlled" or "uncontrolled" costs. Uncontrolled costs are fixed interest charges, depreciation, etc., which accrue, irrespective of the volume of the business done. Controlled costs are costs which may be varied with the volume of the business; the most variable of these costs is raw materials, and, in the absence of labor unions, wages. The larger the uncontrolled costs, the less ability management has to adjust itself to unfavorable business conditions.

⁴⁰ Logically, income is earned not by sales alone, but by each step in the process of production. No one specific event is responsible for its creation. Theoretically, each stage in production should be credited for its proportionate share of the revenue earned. Accountants, however, to avoid "counting their chickens before they are hatched," treat the sale as the crystallization of the earning process and of the amount earned. In long-term projects, however, such as shipbuilding or large construction projects, where the amount of the earnings can be reasonably estimated, income is frequently attributed to the productive process rather than to await its crystallization in the sale. See Husband, "Accounting Postulates; An Analysis of the Tentative Statement of Accounting Principles" (1937) 12 *ACCOUNTING REVIEW* 386, at 394.

⁴¹ The receipt of cash and cash alone is not an adequate basis for income determination. The accrual basis

not only of great theoretical importance in the determination of when revenue is realized, but its aggregate total—net sales⁴² and operating revenues—especially when segregated into major operating activities, is regarded by accountants as secondary only to net profits as the most significant figure in the income statement.⁴³ It aids in indicating whether a corporation is growing or declining, and it provides a measure for an analysis of the competence of the management. Many of the investment analysts' most important ratios depend upon its disclosure.⁴⁴

is generally used. If revenues were recognized only in terms of cash, comparison of the results of periods would be impossible, since revenues "properly allocable" to one period would not be recognized until another, and there would be no assurance that such errors would cancel each other in the long run.

⁴² In connection with any particular income statement it is important to note whether "gross" or "net" sales is the figure given when making comparisons. There is no uniformity of practice as to what is the beginning figure of the income statement, or what deductions are made from the gross figure to give the net sales figure. See Hatfield, *Accounting* (1927) 351, 368; Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 28; and Sunley, "Seen in Published Financial Statements" (1935) 15 *C.P.A.* 682, 683. The accounting forms of the SEC require that the net sales figure (gross sales less discounts, returns and allowances) or gross revenue should be the first figures on the income statement.

Of the 37 companies in 1930 and 54 in 1937 giving a sales figure, the following chart indicates the nature of the beginning figures used:

Beginning Figures:	Number of Companies	
	1930	1937
Gross sales.....	3*	1*
"Sales".....	9	10
Net Sales.....	15	31
Sales and Operating Revenue.....	10	12
	—	—
	37	54

* In 1930, 2 of these companies also gave net sales; and the one company in 1937 also gave net.

⁴³ J. M. B. Hoxsey, in his address to the American Institute of Accountants, "Accounting for Investors" (1930) declared that so important is this figure regarded "that one of the great statistical companies has adopted the policy of refusing to recommend to its clients the securities of companies which do not give this information, on the ground that not enough information is disclosed to permit an adequate analysis." Dean Landis, as Chairman of the SEC, characterized sales and cost of sales as "the most important" figures for income statement analysis. *N. Y. Times*, April 14, 1937, p. 46, col. 1. See also Graham and Dodd, *Security Analysis* (1934) 34; *Twentieth Century Fund, Security Markets* (1935) 581.

⁴⁴ The following ratios of the investment analyst de-

Under the Securities Exchange Act, and the regulations thereto, corporations coming within the Act are required to list net sales in their registration statements and periodic reports to the Commission and exchanges, unless under Section 24(b) written objection to its disclosure is filed with the Commission. The Commission then "may . . . make available to the public the information . . . only when in its judgment a disclosure of such information is in the public interest."⁴⁵ A large number of companies objected to the disclosure of these figures, and, in the early years of the administration of the Act, the Commission was very liberal in granting such petitions.⁴⁶ The usual reason given for refusing to disclose sales and cost-of-sales figures was that it created consumer resistance where the gross-profit margin was wide and that its publication invited competition or gave an advantage to existing competitors, especially where the competitors' figures remained undisclosed.⁴⁷ Investigations later revealed that

in most cases competitors and customers already had obtained the "confidential" information, and that disclosure had little effect upon buying policy.⁴⁸ As a result of this finding the Commission sharply reversed its policy and now denies most of the requests.⁴⁹

Generally speaking, these figures now reach the Commission and the stock exchange on which the security is listed and they are available, theoretically, to the public. But as we have seen, this does not assure that the information is revealed in the annual reports to the stockholders.⁵⁰ In the absence of rules to the contrary⁵¹ by the exchange on which the security is listed, the scope of disclosure in annual reports rests purely in the management's discretion. Of the 70 corporations included in this study (which probably are representative of the best accounting practices) 37 corporations or only 53% reported net sales to their stockholders in 1930, whereas 55 corporations or 79% reported the item in 1937. The 21% which did not report gross sales included such leading corporations as National Biscuit, Quaker Oats, J. I. Case, Allied Chemical and Dye Corp., and Union Carbide and Carbon Corp.⁵²

pend upon the disclosure of the net sales figure: Ratio of operating profit to net sales; ratio of net income to net sales; ratio of net sales to average inventory; ratio of net sales to receivables; ratio of net sales to fixed and to total assets, and to net worth; and ratios of operating expenses to net sales. See Montgomery, *Financial Handbook* (1925) 233; Wall and Dunning, *Analyzing Financial Statements* (1930) 245 *et seq.*; Foulke, "Financial Ratios Become of Age" (1937) 64 *J. of Acctg.* 203, 212.

The following chart indicates the number of companies which gave sufficient information to compute the operating income—net sales ratio:

Net Sales and Net Operating Income Figures	1930	Number of Companies
Sufficient information to make the computation	28	48
Of these no adjustments were necessary in	15	27
Adjustments were necessary in	13	21
"Securities Exchange Act, sec. 24(b).		

⁴⁵ For a rather full discussion, see Comment, "Confidential Treatment of Information Required by the Securities Exchange Act" (1938) 47 *Yale L. J.* 790, 794.

⁴⁶ See Hoxsey, *Accounting for Investors* (1930) 15; *Twentieth Century Fund, Security Markets* (1935) 581. Sunley, "Seen in Published Financial Statements" (1935) 15 *C.P.A.* 682, 683, reports that of the appar-

ently hundreds of statements examined by him, exactly 50% failed to indicate their volume of business.

See note 42 *supra*, for a summary of the opening items contained in the income statements of the 70 corporations included in this study.

⁴⁷ *Id.* at 795. Professor Sanders seems to have more faith in the protests against disclosure of sales figures than most commentators. See Sanders, "Accounting Aspects of the Securities Act" (1937) 4 *Law and Contemp. Prob.* 191, 212-3.

⁴⁸ See Landis, *The Administrative Process* (1938) 42 *et seq.*

⁴⁹ Compare the remarks of Wm. W. Werntz, Chief Accountant of the SEC, in an address delivered before the Controllers Institute of America on September 27, 1938.

⁵⁰ Apparently the listing rules of the New York Stock Exchange do not require a disclosure of net sales or gross revenue, cost of sales, and selling, general and administrative expenses in the annual reports to stockholders.

⁵¹ Of the 70 corporations examined, the following did not disclose net sales in 1937: Allied Chemical & Dye Corp.; American Window Glass Co.; J. I. Case Co.; The Fairbanks Co.; Lehn and Fink Products Corp.;

Cost of Goods Sold. "Cost of goods sold,"⁵³ assuming traditional classifications, is an equally significant figure to investors when coupled with a disclosure of "net sales."⁵⁴ If sales and cost of sales of the past are revealed, the investor is furnished with some basis for predicting the relationship of future costs with future sales, and the resulting gross-profit margin.⁵⁵ If both sales and costs of sales are given, any knowledge the investor may have as to the future increases or decreases in wages or other components of cost of sales and their possible effect upon the gross-profit margin will be useful. In addition, a knowledge of sales and cost of sales provides the investor with a basis for

Lima Locomotive Works, Inc.; Midvale Co.; National Biscuit Co.; Old Dominion Co.; Parke, Davis & Co.; Quaker Oats Co.; Torrington Co.; Union Carbide and Carbon Co.; United Shoe Machinery Co.; Virginia-Carolina Chemical Corp.; Warner Bros. Pictures, Inc. In June, 1938, Allied Chemical & Dye Corp. had a case pending in the Second Circuit Court of Appeals to determine the validity of the Commission's order under sec. 24(b) denying an application for confidential treatment of this and other figures. The National Biscuit Co., R. J. Reynolds Tobacco Co. and The Torrington Co. had all filed similar suits but later dismissed them. Securities and Exchange Commission, Third Annual Report (1937) 179.

⁵³ In concerns where services are sold rather than goods, "cost of goods sold" is not a workable concept, since the allocation of the direct costs of the services rendered is too difficult because "expenses" are inextricably mixed with "costs."

The figure "cost of goods sold" is normally subtracted from net sales and the resulting figure is usually called "gross profit" and by some as "margin of sales." The emphasis which has been placed on this item has been severely criticized by Professor Paton. Paton, "Shortcomings of Present-Day Financial Statements" (1934) 57 *J. of Acct.* 108, 123-5.

⁵⁴ The uses which may be made of the category "cost of goods sold" by the investor are outlined comprehensively in Morrison, "The Interest of the Investor in Accounting Principles" (1937) 12 *ACCOUNTING REVIEW* 37, 40-1. And see Stockwell, *How to Read a Profit and Loss Statement* (1927) 65.

⁵⁵ A wide or narrow gross or net profit margin as compared with competitors in the industry is inconclusive, and suggests further investigation. Either may be a sign of strength or weakness. See Morrison, "The Interest of the Investor in Accounting Principles" (1937) 12 *ACCOUNTING REVIEW* 37, 41. In some situations, where the buyer is convinced that a rise in the cost of the product is imminent, a higher cost of production than that of competitors may be an inducement to purchase speculative stocks of a low price range. See Graham and Dodd, *Security Analysis* (1934), 477-8.

accounting for variations in gross or net profit from one period to another.⁵⁶ Yet despite its required itemization under Securities and Exchange Commission regulations, only 47 of the corporations studied listed the amount of the item "cost of goods sold" in their 1937 annual reports to stockholders. In 1930, the number was 33. Very few of these corporations allocated "cost of sales" to minor operations, a segregation which, if the concept is to realize its maximum value, should be made where practicable.⁵⁷

The mere notation of the figure "cost of goods sold" on an income statement is not of much aid to an investor. Aside from the variations which might be expected to appear due to differences in the nature of businesses or industries, accountants, unfortunately, are not in accord as to what elements of expense should be included in the item "cost of goods sold." Investors are not so much interested in the exact way in which this item is finally defined as they are in having a complete description of the contents of the figure together with such uniformity and constancy in its application as may practically be obtained.

Accounting Terminology defines "cost of goods sold" as "the cost of those goods that have been sold and delivered during the period covered by the account. This consists . . . in the case of manufacturing concerns of the total production cost of the goods sold, including raw materials, labor and manufacturing expenses."⁵⁸

⁵⁶ The causes of variations in profits from one period to another in accounting terminology are outlined in 1 Finney, *Principles of Accounting—Intermediate* (1937) 477.

⁵⁷ Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 30, recommends that this segregation be made. In many companies, undoubtedly, the percentage of error in attempting to segregate expenses may render the breakdown of dubious value. See Hamilton and Till, *supra* note 1, for a summary of the inherent difficulties in allocating and segregating costs.

⁵⁸ American Institute of Accountants, *Accounting Terminology* (1931) 109. Accounting terminology de-

"Total production cost of goods sold," and "manufacturing expenses" are themselves broad categories permitting great latitude in the inclusion or exclusion of specific items. With these loose phrases as their standard of judgment, accountants are called upon to allocate the myriad transactions encountered by modern business. Most items fall into familiar patterns which history and the traditions of the business assign to a particular category with little question; but borderline items must constantly occur, and there the discretion of the management, the quality and integrity of its judgment play important roles. These factors are, undoubtedly, not constant from business to business or from year to year within a business.

"Cost of goods sold," as used in accounting, is a rather artificial concept excluding other costs—selling, general and administrative expenses, maintenance and repairs, depreciation, taxes, etc.—which, from an economic standpoint, are as primary as those costs which "contribute directly" to the physical fabrication of the goods or services. But the concept has some utility, and if it is to be of service to investors as a basis of analysis and comparison, there should be some understanding as to what it includes and some consistency in its application from period to period by each business within an industry. Little uniformity is present today. Some corporations exclude wages; others include selling and administrative expenses, depreciation and even taxes in its determination.⁵⁸ Frequently, it is impossible to determine what is included from the information given in the statements. The Securities and Exchange Commission,

consistent with its approach to accounting problems generally, has proceeded very cautiously in obtaining adherence to an agreed definition, and merely requires an itemization of the amount of "cost of goods sold as regularly computed under the system of accounts followed."⁵⁹ Consistent treatment as to the component items in this concept within an industry seems highly desirable.⁶⁰

Selling, General, and Administrative Expenses. The considerations which suggest disclosure of "cost of goods sold" apply equally well to "selling, general, and administrative expenses." Disclosure of its total is valuable for the purposes of comparison with previous years, with similar expenses of competitors, and as a basis of estimating net profit figures of the future. Despite its importance, only 13 of the 70 corporations listed it in 1930 and but 24 in 1937, even though the SEC in-

<i>Contents of "Cost of Goods Sold"</i>	<i>Number of Companies</i>	
<i>Figures given:</i>	<i>1930</i>	<i>1937</i>
Did not include Depreciation, or Selling, Gen. and Adm. Exp.	8	17
Included Depreciation but not Selling, Gen. and Adm. Exp.	0	6
Included Selling, Gen. and Adm. Exp. but not Depreciation	16	19
Included both Depreciation and Selling, Gen. and Adm. Exp.	9	5
	<hr/>	<hr/>
	33	47

While there were 37 companies in 1930 and 54 in 1937 which reported a net sales figure, 4 of them in 1930 and 6 in 1937 omitted the "cost of goods sold" item.

⁵⁸ Form A-2, Instructions, p. 36; Form 10, Instructions, p. 21; and Form 10-K, Instructions, p. 20. The SEC in Exchange Act Release No. 174 permitted mercantile establishments to include occupancy, buying, and publicity costs in "costs of goods sold"; in the proposed new forms, however, publicity costs must be excluded.

⁵⁹ See, as indicating another attitude, Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 31: "The division of expenses into those to be included in cost of goods sold and those to be treated as subsequent income deductions may be left to the judgment of the management. In making this division it should be borne in mind that usually, though not necessarily, it determines also the cost items to be included in the inventory valuation."

finishes "manufacturing expenses" as "The cost of manufacturing, other than material consumed and direct labor." *Id.* at 60. This definition is almost the purest tautology.

⁶⁰ The lack of uniformity is illustrated in the following chart:

cludes the item in its four principal forms.⁶³

Selling expenses are usually defined to include all expenses in selling, salaries of salesmen, commissions, advertising, etc. Administrative expenses are those expenses incurred in conducting a business as distinct from the expense of manufacturing, selling, etc. It usually includes the salaries of officers, rents of the general offices, office and general expenses. General expenses are considered to be those expenses which do not fall under the category of manufacturing, selling, or administrative.⁶⁴ Again, each of these concepts is extremely broad and loose, and unquestionably many borderline expenditures make it difficult for the accountant to determine proper allocation.

Accountants, at least in their reports to stockholders, usually follow, as does this paper, the division of total costs of operations into cost of sales, selling and distribution costs, and administrative and general costs. This classification puts into "costs of goods sold" only those costs which have an "observable effect" upon plant operations—labor, material, and manufacturing overhead costs. These costs are assigned, by the cost accountant to the units sold. Other costs, selling, administrative and general expenses are often not allocated to the operations or units or period which they may affect, but are thrown into the income account of the period in which they are incurred.⁶⁵ Where these costs bulk large, the inconsistency in handling the two types of costs may make the income account of a particular period misleading not only to investors but to management. Underlying this practice is

not only the practical difficulty of allocating selling and other costs to the period they affect, but an inarticulate premise that the "observable costs of production" are alone the "real" productive costs.⁶⁶ From an economic point of view, all of the costs supply utility and are productive.

In recent years, accountants, for purposes of securing more adequate internal control, have set up cost or expense classifications based upon more functional lines. Under these new classifications, the cost analysis may be in terms of operating or producing departments, by various revenue divisions, by territories, by types of commodities, etc.⁶⁷ The components of each classification change with the purpose and emphasis sought. While accountants have secured to management the benefits of these functional classifications, it has been assumed without question that the orthodox segregations are sufficient for investor purposes. Few, if any, studies have been made to see whether other classifications, along lines suggested by the work of the cost accountants, specifically directed toward the needs of investors, would serve those needs more adequately.

Maintenance and Repairs. It is a generally accepted principle of accounting that expenditures made for maintenance and repairs should be treated as a current operating expense, whereas expenditures for additions or betterments should be capitalized. The problem of allocating a particular expenditure to one of these two categories—perhaps the most troublesome question with which accountants and auditors are confronted⁶⁸—brings into high relief accountancy's fundamental

⁶³ Form A-1, p. 24, and Form A-2, Instructions, p. 37 under the Securities Act; and Form 10, Instructions, p. 22, and Form 10-K, Instructions, p. 21, under the Exchange Act.

⁶⁴ The above definitions follow those given by the American Institute's Committee on Terminology. American Institute of Accounting, *Accounting Terminology* (1931) 59-60.

⁶⁵ See Paton, *Accountants' Handbook* (1934), 157-8.

⁶⁶ *Id.* at 158.

⁶⁷ See Cogburn, "Burden Application," (1938) 65 *J. of Acct.* 208-12; Paton, *Accountants' Handbook* (1934) 157-8, 1332-63.

⁶⁸ "In the audit of a large manufacturing establishment, this is the most troublesome account which the auditor is called to pass upon." Montgomery, *Auditing Theory and Practice* (5th ed. 1934) 516.

problem: charges to capital versus charges to current operations.⁶⁸

Certain cases are clear. A new system of elevators is installed whose useful life will extend considerably beyond the current year's operations. Theoretically, there is little question but that its cost should be treated as an addition to the building account to be written off through depreciation allowances during its estimated life. Minor, regularly recurring adjustments are made in the plant to keep it in good working order. Accountants agree that these should be charged to current operations. But the borderline cases, coming up in everyday operations, create more difficulty.⁶⁹ A part is replaced in an old machine; new tires are bought; a roof is reshingled with new composition material rather than slate, or spruce is used rather than cedar—the cost and the utility may be greater, may be approximately the same, or may be less than the original. Increased utility may correspond with increased cost. Again, it may not; increased utility may result even though the cost of the new material is less than the old. The benefits of the expenditure may be fleeting, or may be extended beyond the current accounting period. In the past, accountants have considered the problem soluble by the application of definitions. If the expenditure merely "replaced" "wear and tear on property," and was not an "improvement or addition",⁷⁰ if it merely "maintained" and did not "increase" "the efficiency of the prop-

erty repaired," it was a "maintenance" or "repair"⁷¹ and chargeable to profit and loss; otherwise the expenditure was a "betterment" or "addition" and chargeable to assets.⁷² But these definitions were, like most definitions, tautological and merely spelled out the mental pictures invoked when the word itself was suggested. All the definition could do in an actual situation was to pose the problem and present it to the expert engineer or plant manager for his judgment: a judgment which might vary in individual experts, in different businesses, with different assets and for different purposes.⁷³ Usually these definitions were considered from the standpoint of broad classes of property or a whole enterprise, although in recent years better managed businesses have introduced detailed plant accounting and have reduced the size of the asset unit.⁷⁴

Few accountants seem to appreciate that the allocation of expenditures to capital or income on the basis of the prevailing metaphysical distinction between maintenance and repairs and additions and betterments violates cherished principles of accrual accounting and historical cost.⁷⁵ The fundamental basis of accrual accounting is that expenditures should be allocated to the period whose operations they can fairly be said to benefit. Thus, that portion of an expenditure which benefits current operations should be treated as

⁶⁸ See the definition of repairs, *id.* at 101. Not all "repairs" are allocated to profit and loss in accounting practice. "Repairs" are divided into two groups—"ordinary" and "extraordinary." The latter is charged to asset accounts.

⁶⁹ Treasury Regulations are responsible partially for perpetuating these definitions in accounting practice. See U. S. Treas. Reg. 94, Art. 23(a)-4.

⁷⁰ Cf. Saliers and Holmes, *Basic Accounting Principles* (1937) 483.

⁷¹ Paton, *Accountants' Handbook* (1934) 526 *et seq.*, describes and criticizes these practices. See, also, Mason *Principles of Public Utility Depreciation* (1937) 23.

⁷² But see Paton, *op. cit. supra* note 74; Mason, *op. cit. supra* note 74, and compare Kohler and Morrison, *Principles of Accounting* (1926) 313-5; Graham and Katz, *Accounting in Law Practice* (1932) secs. 119, 120.

⁷³ "The intimate relationships of depreciation, repairs and betterments is seldom adequately treated in most books on accounting. . . . The student is led to believe that these items are readily classified by the accountant from an examination of invoices, although nothing could be further from the truth . . ." Borth and Winakor, "Some Reflections of the Scope of Auditing" (1935) 10 ACCOUNTING REVIEW 174, 180.

⁷⁴ See the illustrations given in Kohler and Morrison, *Principles of Accounting* (1927), 313-4.

⁷⁵ This is the definition of "Betterment" in American Institute of Accounting, *Accounting Terminology* (1931) 28.

an expense, and the portion which benefits future operations should be capitalized and then amortized during the applicable periods. If an item whose benefits extend to future periods is classified as maintenance or repairs and is thus charged wholly to current operations, the result is that expenses for the current period are overstated and the income of that period correspondingly understated. Conversely, if future periods are not benefited and the item is classified as an addition or betterment and capitalized, present income is overstated and future income understated.⁷⁶ The distinction between a capital expenditure and an income expenditure should not rest on whether the property is either "bettered" or "maintained" thereby, but rather upon the relation between the anticipated useful life of the asset acquired and the length of the accounting period for which income is being determined.⁷⁷

Historical cost accounting principles are violated also by the application of the generally accepted definition of maintenance and repairs. Parts of a machine wear out and new parts are purchased at prevailing prices, not necessarily comparable with the cost of the original parts. If such replacements are charged to current operations, the asset account continues to reflect the cost of the original asset, whereas in fact after a period of years the asset consists of numerous replacements purchased at entirely different prices. Finally, by virtue of this cumulative process, the books reflect not the cost of

⁷⁶ Cf. Paton, *Accountants' Handbook* (1934), 526-7. Justice Brandeis, dissenting in *United Railways v. West*, 280 U. S. 234, 260-1 (1930), expresses this point of view as clearly as any other commentator.

⁷⁷ "If the accounting period were increased from the customary year to a decade, most of which is now treated as capital expenditure would become chargeable to income; while if the period were reduced to a day, much of what is now treated as current maintenance would become capital expenditure." May, "Improvement in Financial Accounts" (1937) 63 *J. of Accty.* 333, 334.

the assets now in use but assets long since consigned to the junk heap.

Such are the theoretical criticisms of the accepted definitions and distinctions between maintenance and additions as they are currently applied in practice. The writers do not overlook the practical difficulties which may in some situations confront the accountant in applying a strict accrual system. In some businesses, or for some types of assets, a strict accrual system may involve an unreasonable amount of record detail for which more accurate results are not sufficient compensation.⁷⁸ The prevailing question-begging definitions, however, under which specific expenditures are categorized, prevent the application of accrual accounting even where bookkeeping economy is not a factor.

What other interests does the investor have in this problem? Obviously, an investor has a primary interest in the managerial-engineering problem of maintaining and advancing the plant's physical equipment to keep it abreast or, if possible, ahead of the normal progress in the industry. In the long run, the particular account charged for expenditures for this purpose is of secondary consideration. No balance sheet or income statement, unless the re-

⁷⁸ For large nonrecurring types of expenditures, concededly, the general accrual method should be followed. But where the expenditures are frequent and constantly recurring, the theoretical solution may not always prove practical, due to the infinite amount of accounting detail necessary to carry it out. For instance, to follow the theoretically accurate method, where a firm has a large fleet of delivery trucks, would require a separate account for each truck. This amount of detail might be considered too expensive. Consequently, the cost accountant may devise a more practical method of arriving at a reasonably accurate figure. In the case assumed, the cost accountant of the firm, from past experience, might have found that during past years, with a given number of trucks, so much per mile must be spent for tires, so much for repairs and so much for partial replacements in order to maintain a reasonably efficient fleet of trucks. The sum of these items would then be treated as "maintenance and repairs" and charged to current operations. This device should work reasonably well where the number of items is large and constant replacement is necessary.

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corded sums are clearly inadequate, can indicate definitely whether management is doing its job in making the necessary expenditures for maintenance and betterment. Only the results of future operations may throw some light upon it. But the income statement and balance sheet reflect the judgment of the management as to the allocation of these expenditures. Since it is so often a close question of fact, especially under the current practice, as to whether a particular expenditure should be charged to current revenue or not, management is in a position to allocate those expenditures to suit its particular purpose. If a favorable showing is desired, expenditures which normally would be charged to current operations could be charged to assets, with the result that both assets and current profits are inflated.⁷⁹

Or if an unfavorable showing is desired, the reverse process is instituted. Often, distortions in allocation may come as a result of the desire of a plant manager to keep "costs" of operation down and thus increase the apparent profits by charges to asset accounts rather than to current operations.⁸⁰ The investor or stockholder is in no position to prevent this manipulation. His first line of defense is the independent auditor who, he hopes, is able to resist the strong forces arrayed against him, and who will refuse to approve unreasonable allocations. His second defense is a disclosure of the allocation of these expenditures during a particular year to the income and the asset accounts, supported, where practicable, by more detailed and illustrative schedules.⁸¹ Comparison with previous years and with other

companies in the same industry may bring to light practices sufficiently flagrant to put him on guard. Both itemization in the income account and the schedules of changes in assets and the accounts charged with maintenance and repairs are now required by the Commission. Important as this information is, very few corporations in their annual reports to stockholders, even in 1937, presented this figure in their profit-and-loss statements, and almost as few presented schedules of the changes in the asset accounts and the maintenance-and-repairs charges during the years examined. In 1930 only two, and in 1937 only four, corporations gave a maintenance-and-repairs figure in the income statement. Six companies presented schedules of changes in assets both in 1930 and 1937 and three companies tendered maintenance-and-repairs schedules in both years.

Depreciation. Until fairly recently, many corporations did not make any provision for depreciation in computing income. In an investigation conducted in 1916, the Federal Trade Commission discovered that out of 60,000 apparently successful corporations doing at least \$100,000 a year of business, fully one-half did not take depreciation into account at all.⁸² In the years before the Federal income tax laws made depreciation allowances profitable, it was not very difficult to disregard the fact of daily wear and tear on physical equipment in the urge to make favorable showings and pay dividends.⁸³ Depreciation—the loss in physical or functional value, due primarily to ordinary wear and tear and obsolescence⁸⁴—is as much a cost of doing business as is the cost of coal consumed in running the plant; it differs

⁷⁹ See Montgomery, *Auditing Theory and Practice* (5th ed. 1934) 516.

⁸⁰ See I. May, *Twenty-Five Years of Accounting Responsibility* (1937) 158-9; Montgomery, *Auditing Theory and Practice* (5th ed. 1934) 517.

⁸¹ The forms of the Securities and Exchange Commission require such itemization. See Form A-2, Instructions, p. 36 and Schedules II and VIII.

⁸² Ripley, *Main Street and Wall Street* (1926) 174.

⁸³ It was not until 1909 that the Supreme Court recognized that allowances for depreciation were a legitimate expense of operations of public utilities. See *Knoxville v. Knoxville Water Co.*, 212 U. S. 1 (1909).

⁸⁴ This definition follows *Accounting Terminology* (1931) 48-9.

from other costs only in that it does not represent an immediate, current outlay of cash.

The annual provisions for depreciation affect both the income statement and the balance sheet. The debit entry represents an expense charge to income, increasing operating expenses and thereby diminishing income. The reciprocal credit entry to the depreciation reserve results in a reduction in the net book value of the asset on the balance sheet unless the reserve is presented on the liability side. The latter practice is objectionable in that assets then will not reflect the estimated loss due to wear and tear; unsophisticated investors may be misled by the larger aggregate balance-sheet totals.

An investor has essentially two major interests in accounting for depreciation: Is the allowance for depreciation treated as an operating expense? Are the allowances reasonable and adequate?

No respectable accountant today, despite a curious confusion as to the nature of accounting for depreciation,⁸⁵ would deny that the annual allowances should be treated as an operating expense and disclosed separately on the income statement. The SEC, of course, in all of its forms requires its itemization.⁸⁶ Despite this unanimity of opinion, 22 corporations of the 70 studied in 1930 did not separately note their depreciation charges for the year; of the 22, ten mentioned that depreciation charges had been deducted but did not disclose the amount; in 1937, sixty-six companies mentioned and disclosed a depreciation charge; four cavalierly continued to ignore it.⁸⁷

⁸⁵ See Hatfield, *Accounting* (1928) 26; Hatfield, "What They Say About Depreciation" (1936) 11 *ACCOUNTING REVIEW* 15-26.

⁸⁶ Form A-1, p. 24; Form A-2, Instructions, p. 36; Form 10, Instructions, p. 22; and Form 10-K, Instructions, p. 22 and Schedule X.

⁸⁷ The following chart indicates roughly the accounting treatment of the depreciation allowances in the income statements examined:

Depreciation allowances have always been a fertile source of manipulation of income; they may be played with either to pack or minimize current profits.⁸⁸ Unless the management is like Caesar's wife, a careful investor must be prepared to compare the depreciation charges of his company over a period of years (assuming he can obtain the figures) in order to see if a consistent depreciation policy has been followed and if one year's charges are not meager or overgenerous in relation to other years.

A further comparison of the depreciation figures and methods of similar sized companies in the same industry is desirable.⁸⁹ Accounting authorities disagree sharply as to the preferable system or theory of accounting for depreciation—retirement or depreciation systems. Among companies following the retirement system, there are no accepted methods of determining the amount of the annual provisions for retirements.⁹⁰ Many com-

Depreciation Item in Income Statement:	Number of Companies 1930	1937
Amount not disclosed separately	22	4
Item mentioned but not disclosed	10	0
Amount given	48	66
Deducted prior to operating income figure	14	36
Deducted after operating income figure	43	28
Allocated—deducted in two places	1	2

⁸⁸ Ripley, relying on Cole's *American Wool Manufacture*, points out that it is practically impossible to determine whether the American Woolen Co. earned its preferred dividends in the 15 years prior to the World War since part of its surplus was the result of inadequate provision for depreciation. Ripley, *Main Street and Wall Street* (1926) 177. On the other hand the National Biscuit Co., prior to 1922, resorted to highly excessive charges to depreciation in order to conceal its large profits. The policy was abandoned in that year—the company multiplied its number of shares by seven and quadrupled the amount of dividends paid. *Id.* at 180.

⁸⁹ Investment analysts' ratios are also helpful. Graham and Dodd, *Security Analysis* (1934) 398 *et seq.*

⁹⁰ The retirement system, while still used by many utility companies, is gradually being abandoned. A substantial number of states have adopted the uniform systems of accounts of the National Association of Railroad and Utility Commissioners and of the Federal Power and other Federal regulatory commissions which all provide for the depreciation system.

panies arbitrarily allocate an amount which they deem sufficient to cover the currently expected retirements. Others appropriate a fixed percentage of the gross revenue or sales. Many varieties of allocation are also available under the depreciation system—the straight-line method, the reducing-balance method (used in England), the sinking fund method, the annuity method, and the working hour or production method. As the Report of the Committee of the American Institute of Accountants on Coöperation with Stock Exchanges pointed out, each of these methods is ". . . supported by respectable argument and by usage, and the charges against a particular year may vary a hundred per cent or more according as one or the other permissible method is employed."⁹¹ The wide area of discretion presently available to management in the choice of methods of depreciation and the important consequences of that choice upon the net income figure for the year, require, in the investor's protection, that the income statement should contain some explanation of the method used. Any change in method or significant changes in the technique of applying that method should be disclosed and the effect upon the year's income noted.⁹²

Depreciation figures reported to stockholders frequently differ, as do other figures on the income statement, from the depreciation deductions allowed by the Bureau of Internal Revenue under the Income tax laws. As a result, net income for income tax purposes differs from net income for corporate purposes. In any given case, however, the divergence may be perfectly justifiable from the investors' viewpoint as well as the management's.⁹³

It is not until the termination of a business that anyone can say with some certainty what depreciation charges should have been made during any particular year. Prior to that, the "proper" depreciation charge is a rather loose estimate, varying with the judgment of men, the past experience and traditions of the particular company and the industry, the method employed, and other innumerable variables. It is not at all surprising that a judgment reached for income tax purposes—a reconciliation of the conflicting interests of a taxpayer and his government—will differ from a judgment reached for the purposes of reporting to stockholders or for internal control. Nevertheless, since the depreciation estimate has a long history of abuse and since it is always a potential source of manipulation, investors should inquire more closely into the reasons for known differences.

Extraordinary Gains and Losses—Income vs. Surplus Allocations. A corporation sells a building or securities in its investment portfolio and suffers a loss. Shall this loss, in either or both cases, be reflected in the income statement, be charged against earned, capital surplus, or an anachronistic unsegregated surplus account, or be set up as an asset to be amortized out of income of future years?⁹⁴ Would the same rule apply if a gain were

different base is used for tax purposes than for corporate purposes. Companies with a long corporate existence often have undergone one or more reorganizations or mergers under which they are permitted to use the same base for income tax purposes as was used by the predecessor corporation, whereas the base for corporate purposes may be the reorganization or merger price. Similarly, the rates for depreciation prescribed by the Bureau of Internal Revenue may legitimately be considered too liberal or inadequate for corporate purposes and therefore a different rate may justifiably be used.

⁹¹ Another possibility is to carry the gain or loss as an additional item in the net worth section, leaving the existing surplus accounts untouched, and at some future time absorbing it in one or more of the surplus accounts. See Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 32.

⁹² Report of Committee of American Institute of Accountants on Coöperation with Stock Exchanges, *Reports to Stockholders* (1932) 6.

⁹³ See Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 32.

⁹⁴ Such differences may arise from the fact that a

realized? The corporation decides to write its plant down because depreciation and obsolescence charges in past years proved to be inadequate or because the corporation wants to reduce future depreciation charges in order to increase the net income of future accounting periods. Shall this charge be reflected in the income of the year in which the decision is made or shall it be attributed to some surplus account? Similarly, how shall the writing off of goodwill, adjustment of prior years' inventories or taxes, abandonment of property, losses from flood or fire, moving expenses, recovery of items previously written off, and all other "nonrecurring gains and losses" be handled? Is the same rule applicable to all of these items or to any one of them irrespective of its history and surrounding circumstances? The problem is far from academic, for the policy followed in allocating these "extraordinary" incidents of a business will affect the reported income very materially. If the United States Steel Corporation, for example, had followed an alternative advocated by the Tentative Statement of the American Accounting Association in handling these extraordinary items,⁹⁵ its income account for 1935 would have shown a net loss of almost \$269,000,000 rather than the net income actually reported of \$1,146,708.⁹⁶ This incident is, of course, spectacular, but variations from 30 to 50% in the total income reported if another policy had been adopted are not uncommon.⁹⁷

⁹⁵ "American Accounting Association, A Tentative Statement of Accounting Principles" (1936) 11 ACCOUNTING REVIEW 187, 189-90. See postulates 8 and 11.

⁹⁶ The corporation wrote its plant down \$270,000,000—charging a previously appropriated earned surplus account. The "Tentative Statement," *supra* note 94, would have charged it to the income account for the year, or would have had the income figures for the past years recast.

⁹⁷ Hosmer, "The Effect of Direct Charges to Surplus on the Measurement of Income" (1938) 13 ACCOUNTING REVIEW 31, 43; Greer, "Uniformity in Accounting

The investor's needs in the handling of these gains and losses are two-fold:

(1) The itemization and segregation of these "nonrecurring incidents" from the results of "normal" current operations;

(2) Greater agreement among accountants both in theory and in practice as to a workable general policy to be followed in allocating these items in order to minimize the possibilities of manipulation and to provide investors with a comparable basis for determining past results of the same company and other companies in the same or other industries.

Accountants are probably agreed that substantial "nonrecurring profits and losses," whether reflected in the income statement, or elsewhere, should be itemized and segregated from the "ordinary recurring income" of the period.⁹⁸ Obviously, if these items are included in income without a specific indication of their presence and amount, the investor is misled in his estimate of the probable future earning power. Accounting practice, however, has been far from meticulous in its observance of this principle of segregation.⁹⁹

Statements," *Proceedings of the First Institute on Accounting* (1938) 133.

⁹⁸ Schedule A of the Securities Act requires a disclosure of all "charges . . . made against its various surplus accounts" and a differentiation of "recurring and nonrecurring income." Subdivision (26). The Exchange Act leaves the scope and contents of the financial statements required to the discretion of the Commission. Sec. 12(b) (J) and (K).

The instructions to Forms A-1 and A-2 under the Securities Act and Forms 10 and 10-K under the Exchange Act contain almost identical requirements as to disclosure of all substantial non-recurring debits and credits. In addition, the required surplus schedules must specify all additions and deductions from surplus and indicate whether "they are of the nature of capital or earned surplus items." Form A-2, Instructions, Schedule VI, at 46; and Form 10-K, Instructions, Schedule IX, at 32.

The listing requirements of the New York Stock Exchange also require a disclosure of "any substantial item of an unusual or nonrecurrent nature." New York Stock Exchange, Committee on Stock List, Requirements for Listing Applications (1937) 8. See also Investment Bankers Code of Fair Competition (1934) 12; "Tentative Statement" (1936) 11 ACCOUNTING REVIEW 187, 189 (Postulates 8 and 11).

⁹⁹ See Graham and Dodd, *Security Analysis* (1934) cc. 31, 32, for specific instances of abuses of this sort.

In the writers' study of 70 corporations, over twice as many itemizations of extraordinary credits or debits, whether to income or surplus, were found in 1937 as in 1930. While some of the increase may be attributable to a greater number of transactions affecting surplus in 1937, most of it seems due to a policy of non-disclosure in the 1930's. The extent of non-disclosure persisting today is very difficult to determine, since the item may be assimilated into another disclosed item or may be debited or credited without notation to some reserve account. Undoubtedly, credits are more likely to be revealed than debits. It seems clear that accounting morality requires both full disclosure and segregation in all instances of substantial nonrecurring gains or losses.¹⁰⁰

There are few accounting problems on which both theory and practice are in such confusion as in the allocation of "nonrecurring" incidents of a business. The problem raises a fundamental query as to the nature and function of an income account. One school of accounting, including most practitioners (to judge by their published reports) and many writers¹⁰¹ have a mental picture of "normal" or "recurring" operations of a business, producing financial transactions "applicable to the period under review"—which are to be reported

in the income statement while nonrecurring transactions are not. The business activities and their resulting financial items which do not fall within this picture of the "normal" operations of the business are categorized as "extraordinary," "non-recurring," "not applicable to the period under review" and are dumped into some surplus account, preferably earned surplus. Vitality is supplied to this symbolism by the opposition to the capital gains tax.¹⁰²

Unfortunately, the lines between "normal" and "abnormal" business activity are in practice very difficult to draw,¹⁰³ and once drawn, may lead to serious distortions in the presentation of income. There is the tendency of management, except for income tax purposes, to classify all doubtful gains as income and to charge all doubtful losses to surplus. Depreciation may be kept at undersized figures in order to increase the reported net income—the eventual loss being charged to surplus, and not to income. And where an item is debited or credited to surplus directly, it never is reflected in income reported—and the income statement becomes only a partial view of the total gains and losses encountered by the business.

More important, perhaps than any of these reasons, the dichotomy of "recurring," and "nonrecurring" items results in a diversity of accounting practices which makes comparison between corporations difficult, and permits an easy manipulation of these items to either income or surplus as management may desire. As a reaction to the uncertainty and abuses of the "recurring" school, the Tentative Statement of Accounting Prin-

¹⁰⁰ In the Matter of American Terminals and Transit Co., 1 SEC 701 (1936), the Commission held that the designation of a nonrecurring income item as "other income" was misleading. One of the principal deficiencies cited in the Commission's Order for Hearing in the Associated Gas and Electric Co. delisting case, was the "failure to charge to registrant's income account" certain extraordinary expense items. Securities Exchange Act Release No. 1985 (January 13, 1939).

¹⁰¹ See Stockwell, *How to Read a Profit and Loss Statement* (1927) 367; Kester, *Advanced Accounting* (3d ed. 1933), 356-7; Rowe, "Surplus Adjustments" (1933) 56 *J. of Acctg.* 291-3; Littleton, "Dividends Presuppose Profits" (1934) 9 *ACCOUNTING REVIEW* 304; Marple, *Capital Surplus and Corporate Net Worth* (1936) 144; 1 Finney, *Principles of Accounting—Intermediate* (1937) 112; and 1 May, *Twenty-Five Years of Accounting Responsibility* (1937) 325. In England, gains and losses on the sale of capital assets are regarded as increasing or decreasing capital, and are not reflected in the income account.

¹⁰² The carryover is reflected clearly in 1 May, *Twenty-Five Years of Accounting Responsibility* (1937) 319 *et seq.*; Littleton, "Dividends Presuppose Profits" (1934) 9 *ACCOUNTING REVIEW* 304, *et seq.*

¹⁰³ See Hosmer, "The Effect of Direct Charges to Surplus on the Measurement of Income" (1938) 13 *ACCOUNTING REVIEW* 31, 44-5.

ciples of the American Accounting Association, proposes a drastic solution. Postulate 8 states:

"The income statement for any given period should reflect all revenues properly given accounting recognition and all costs written off during the period, regardless of whether or not they are the results of operations in that period: to the end that for any period of years in the history of the enterprise the assembled income statements will express completely all gains and losses."¹⁰⁴

The postulate contemplates an important change in the scope of the income statement; under the "recurring" view, reported income reflects only a portion of the total of the company's business activities of the year. The Tentative Statement proposes that income should include *all* changes in proprietorship from any causes during the period under review as well as any adjustments made to allow for profits and losses "which are not strictly applicable to the current period but which have been recognized in the accounts during that period."¹⁰⁵ In unusual situations, where the "material losses or gains recognized during the current period actually apply to earlier periods," the comment to Postulate 8 suggests either of two alternatives:

"... show the extraordinary charges or credits in the current income statement or... restate the income statement of the proper number of past periods. Should the latter alternative be adopted, the revised statements of past periods should accompany the statement for the current period. It seems obvious that in any series of statements of corporate results adjustments of previously stated profits should not be excluded—adjustments which have been known to outweigh the total stated gain or loss for a considerable period of years."¹⁰⁶

Postulate 8 and its accompanying comments suggest many advantages. It makes the income statement present a total view

¹⁰⁴ (1936) 11 ACCOUNTING REVIEW 187, 189.

¹⁰⁵ *Id.* at 190.

¹⁰⁶ *Ibid.*

of business activities; it is a simple rule, relatively easy to apply; it provides a more uniform basis for comparison between corporations (under Postulate 11, these "nonrecurring" items are to be segregated from the operations section in the income statement); it shuts off an important source of manipulation and abuse. On the other hand, the postulate may be too rigid and too simple a solution for a highly complex problem. It may well be that it does not serve the interest of all concerned, the corporation, stockholders, creditors, and the public, to have all of the transactions of the year reflected in the income statement. Some substantial adjustments and capital gains and losses have little relation to current operations and their inclusion in the income statement, even when segregated, may be misleading.¹⁰⁷ As Professor Hosmer has pointed out, application of the postulate to the United States Steel Company's \$270,000,000 plant write-down charge to earned surplus in 1935 may have had disastrous consequences for the corporation and its stockholders.¹⁰⁸

Hosmer has suggested that Postulate 8 should be accepted as a presumptive rule only; that presumptively all extraordinary gains or losses should be reflected in the income statement of the period in which they are recognized, unless the interests

¹⁰⁷ See Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 39.

¹⁰⁸ Hosmer, *supra* note 102, at 49-50. If U. S. Steel had charged the \$270,000,000 to income, with a resulting \$269,000,000 loss for the year, the effect upon the price of the company's stock, and, perhaps upon business confidence, might have been of serious proportions. The alternative suggested by the Tentative Statement of recasting the income accounts would be very difficult to apply in practice since "the proper number of past periods" for which depreciation and obsolescence were computed wrongly is perhaps impossible to ascertain. Furthermore, recasting past income statements, of course, cannot undo the effects of their previous publication upon investors and the country at large. People have acted upon them already for good or evil. For future action, however, recasting may throw more light upon the corporation's past than retention of old figures known to be wrong.

of the corporation, stockholders, creditors, or the public are affected adversely by such an allocation.¹⁰⁹ This formula, however, may be loose enough to enable management to rationalize under it many objectionable present practices.¹¹⁰

The Securities and Exchange Commission under the Exchange Act has, until recently, permitted management a wide range of discretion in the allocation of "extraordinary" items. The instructions to the forms merely require disclosure and segregation of the "nonrecurring" items reflected in the income statement,¹¹¹ and a complete itemization of all additions and deductions to surplus in an attached surplus schedule.¹¹² These additions and deductions from surplus must "be so design-

nated as to indicate clearly whether they are of the nature of capital or earned surplus items."¹¹³ Nothing is said as to what items may or may not be charged to income, earned surplus, capital surplus, or reserve accounts.¹¹⁴

In the administration of the Securities Act, the Commission has had sharp internal disagreements over the charging of certain items to capital surplus rather than to current operations or earned surplus. In the *Northern States Power Company* and *Chesapeake Corporation* cases,¹¹⁵ the registrants had written up their assets, creating large capital surplus accounts. Against this account, both companies wrote off millions in unamortized debt discount and expense instead of amortizing by charges to profit and loss. In a third case, the *Thermoid Company*, among other doubtful accounting practices, charged off debt discount against an existing capital surplus account.¹¹⁶ In another case, the *Monongahela West Penn Public Service Company* made a running "horseback appraisal" of its properties, crediting the writeup to an appraisal surplus, and in the following five years, charged abandonments of traction properties to this surplus. In all of these cases, the Commissioners unanimously disapproved the accounting, but the majority were content to force an amendment to the accountant's certificate stating the alternative treatment of charging to profit and loss and what the effect of such a procedure would have been. A minority of the Commissioners took the view that reservations in footnotes or an accountant's certificate

¹⁰⁹ Hosmer, "The Effect of Direct Charges to Surplus on the Measurement of Income" (1938) 13 ACCOUNTING REVIEW 31, 43 *et seq.* See also Hoxsey, *Writing Down Assets and Writing Off Losses* (1933) 12.

¹¹⁰ A fundamental source of the difficulty lies in the attempt to allocate gains and losses realized from transactions, years in the making, to one short fiscal period. Accounting marks off arbitrarily a continuous flow of interrelated events into periods measured by the fiscal year; an attempt is then made to isolate the related events into clean-cut transactions allocable to a definite period of time. The sharp distinction drawn between income statements and surplus statements—between income of one period and the income of past periods, and the resulting premium placed on a strategic allocation of a particular item to one or the other statements—further heightens the difficulty. It has been suggested that the cleavage wrought by the calendar year concept can be bridged somewhat by combining the income statement and the earned-surplus statement into a single net-worth statement, thus decreasing the importance of allocating a particular item to either income or earned surplus. Such a statement might start with the net worth at the beginning of the period. To this should be added, in the first subdivision, new capital contributions. The next subdivision would be devoted to changes in net worth resulting from "normal operations." The last section would reflect the payments of dividends and credits or debits for "extraordinary gains and losses" not fairly applicable to "normal operations," finally arriving at the net worth at the end of the period. While a net-worth statement of this type does not solve the problem of allocating border-line items between income and surplus, it does tend to minimize the distinction and shifts the emphasis to a more complete disclosure of all accounting transactions recognized during the period—which, after all, is what the investor needs.

¹¹¹ Form A-2, Instructions, at 37; Form 10, Instructions, at 23; and Form 10-K, at 21.

¹¹² Form A-2, Instructions, at 35 and Schedule VII; Form 10, Instructions, at 21 and Schedule VII; Form 10-K, Instructions, at 19 and Schedule IX.

¹¹³ Form 10-K, Schedule IX.

¹¹⁴ Form A-1, under the Securities Act, more than any other form, directs the registrant to allocate his extraordinary items along approved accounting channels. Instructions, at 32.

¹¹⁵ These cases are commented upon by Commissioner Healy in an address, "The Next Step in Accounting" (1938) 13 ACCOUNTING REVIEW 1, at 2-4, delivered before the American Accounting Association in December, 1937.

¹¹⁶ *Ibid.*

were not enough, and that the company's earnings records and earned surpluses as stated in their registration statements were untrue and amounted to misrepresentations.¹¹⁷

In at least two subsequent instances, the Commission indicated a tendency to depart from the majority policy. In one case, a reproduction appraisal credited the resulting increase in "value" to capital surplus, and the company announced its intention of charging certain items such as organization expenses to this surplus. The Commission threatened stop order proceedings, and the company erased the entries and recorded its property at cost.¹¹⁸ In another case, the registrant wrote down the net cost value of plant and equipment to a valuation established by the officers and charged the write-down against capital surplus rather than earned surplus. The capital surplus was created specifically for this purpose by a reduction of stated capital pursuant to resolutions adopted by the directors and stockholders. The opinion of Carman Blough, then Chief Accountant of the Commission, issued as Accounting Release No. 1, pointed out that the write-down of assets was a recognition of inadequate depreciation charges against the income of prior years, and then stated:

"It is my conviction that capital surplus should under no circumstances be used to write off losses which, if currently recognized, would have been chargeable against income. In case a deficit is thereby created, I see no objection to writing off such a deficit against capital surplus, provided appropriate stockholder approval has been obtained. In this event, subsequent statements of earned surplus should designate the point of time from which the new surplus dates.

"Accordingly, in my opinion, the charge here in question should have been made against earned

¹¹⁷ Healy, *supra* note 115, at 4-5. See, as supporting the minority view, "Accounting and the SEC" (1937) 12 *ACCOUNTING REVIEW* 309, 310.

¹¹⁸ Healy, "The Next Step in Accounting" (1938) 13 *ACCOUNTING REVIEW* 1, 5.

surplus. In view of the stockholder action that has been taken, I see no objection to the deficit in earned surplus resulting from this write-off being eliminated by a charge to capital surplus created by the restatement of capital stock."¹¹⁹

Following changes in the personnel of the Commission,¹²⁰ a firmer stand, approaching the minority view, was taken. The new administrative policy was announced in Accounting Release No. 4:

"In cases where financial statements filed with this Commission pursuant to its rules and regulations under the Securities Act of 1933 or the Securities Exchange Act of 1934 are prepared in accordance with accounting principles for which there is no substantial authoritative support, such financial statements will be presumed to be misleading or inaccurate despite disclosures contained in the certificate of the accountant or in footnotes to the statement provided the matters involved are material. In cases where there is a difference of opinion between the Commission and the registrant as to the proper principles of accounting to be followed, disclosure will be accepted in lieu of correction of the financial statements themselves only if the points

¹¹⁹ SEC, Accounting Series, Release No. 1 (April 1, 1937). A similar position was previously taken by a committee of the American Institute of Accountants in a report to the Committee on Stock List of the New York Stock Exchange in 1932. Postulates 17 and 19 of the Tentative Statement of Accounting Principles state the same proposition. "American Accounting Association, A Tentative Statement of Accounting Principles" (1936) 11 *ACCOUNTING REVIEW* 187. The New York Stock Exchange has a standard clause in its listing agreement with corporations which reads similarly to Accounting Release No. 1.

William W. Werntz, Chief Accountant of the SEC, in an address before the Annual Meeting of the American Accounting Association, December 28, 1938, at Detroit, stated that the Commission, in a number of cases settled over the conference table, has insisted that the absorption of an operating deficit through charges to capital surplus can be made only by stockholder's consent after full disclosure of all surrounding circumstances. Such transactions are considered to be quasi-reorganizations, whereby, through stockholder consent, earned surplus is relieved of the burden of absorbing past losses, thus facilitating the future payment of dividends.

¹²⁰ Chairman James M. Landis resigned September 15, 1937, and was succeeded by Mr. William O. Douglas on September 21, 1937; Commissioner J. D. Ross resigned October 31, 1937; Mr. Jerome N. Frank took office on December 27, 1937; and Mr. John W. Hanes on January 14, 1938. The release was issued on April 25, 1938. Subsequently Mr. Hanes resigned (June 30, 1938), and was succeeded by Mr. Edward C. Eicher.

involved are such that there is substantial authoritative support for the practices followed by the registrant and the position of the Commission has not previously been expressed in rules, regulations or other official releases of the Commission, including the published opinions of its Chief Accountant."¹²¹

It marks a major step forward to require that the laggards of the profession live up to the level of accounting practice for which there is "substantial authoritative support." The release, however, contains many problems of interpretation. What constitutes "substantial authoritative support"? Is the approval of a respectable minority of accountants sufficient? What will the Commission do if there is no generally recognized practice or literature in regard to the handling of a particular transaction? Is the release applicable to "closed" transactions of past years—in other words, would the result of the *Northern States Power Company* case have been changed if this release had been in existence? If so, a large percentage of balance sheets now filed with the Commission will require substantial restatement in the light of an audit going far back in the company's history. Furthermore, many a corporate dividend, authorized in reliance on the accountant's certificate, will, by the changed entries, now appear improper; directors, conceivably, may, thus, be subjected to criminal penalties and both stockholders and directors to restitution. These practical considerations suggest that it may be inadvisable to interpret Release No. 4 retroactively. On the other hand, other techniques, despite comparable inconveniences, constantly revise old practices in the light of current knowledge. Unless the costs of restatement are prohibitive, accountancy and business should not insist upon the preservation in today's accounting statements of the errors of the past.

Segregation of the Sources of Surplus. To the accountant, surplus is merely the balancing figure remaining after deducting the sum of the par or stated value of capital stock and all liabilities from the total of all assets. Surplus plus the amount of the capital stock represents the stockholders' equity in the assets of the corporation. The surplus reported may be only a book arithmetical surplus not realizable in the market place; it usually is no more than that where a substantial percentage of the total assets are fixed and are entered on the balance sheet at historical cost figures or at conjectural and usually sanguine appraisal figures.

Surplus arises from highly diverse sources. Earned surplus, paid-in surplus arising from the sale of stock at a premium, revaluation surplus, donated surplus, surplus from the sale of treasury stock, surplus from the reduction of stated capital are among the subdivisions of generic surplus. Their categorizations reflect their origin.

Genealogy is of great significance to surplus. Earned surplus holds an honored position because of its relationship to earnings and to dividends. Some of the other surpluses are offspring of illicit affairs (revaluation surplus); others of less dubious ancestry are not welcomed in the best corporate circles (surplus from restatements of capital); still others have such ambiguous origins that they dare not, and frequently cannot, be revealed (unsegregated general surplus account). And commonly, all surpluses, other than earned, veil their past in the protective anonymity of the label "capital surplus."

Because of its relationship to earnings and dividends, earned surplus should be segregated and disclosed separately from all other surplus accounts. The Securities Act itself in schedule A provides specifically for a disclosure of the "... surplus

¹²¹ SEC Accounting Series, Release No. 4.

of the issuer showing how and from what sources such surplus was created."¹²² The Exchange Act is not explicit on this point, but the Instruction Book for Form 10-K provides for the division of this item into (a) paid-in surplus and/or (b) other capital surplus; and (c) earned surplus.¹²³

In practice, however, these divisions, for past accounting periods, often are impossible to ascertain. The surplus account may never have been segregated in the past, and no one can tell in what proportions dividends are to be taken to have been charged against its earned and non-earned components. Further, no one can tell how other past charges or credits, e.g., capital gains and losses, should be apportioned now in the general surplus account. And accounting theory, much less accounting practice, is not crystallized sufficiently to enable one to say with certainty whether certain doubtful items are to be charged against earned rather than capital surplus, or the converse.¹²⁴

These inherent and historical difficulties have prevented the Commission from insisting upon its divisions of surplus in all cases. Surplus must be segregated, but

"... if in the accounts, separate balances for these are not shown at the beginning of the fiscal year, i.e., if the company has not, up to the opening of the fiscal year, differentiated in its accounting for surplus as above indicated in (a) and/or (b) and (c), then the surplus may be stated in one amount."¹²⁵

In the future, however, segregation of capital and earned surplus will be required.¹²⁶

¹²² Securities Act, Schedule A (25). See also Instruction Books for Forms A-1, at 32, and A-2 at 46, n. 1, for the schedules and detail required by the Commission under the Securities Act.

¹²³ Schedule IX, at 32. Similar requirements are contained in the Instruction Book for Form 10, Schedule VII, at 26.

¹²⁴ Cf. Sanders, "Accounting Aspects of the Securities Act" (1937) 4 *Law and Contemp. Prob.* 191, 200-2; Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 92-7.

¹²⁵ Form 10-K, Instructions, at 19.

¹²⁶ A new form, now in the process of preparation,

There has been a marked improvement in the disclosure of sources of surplus from 1930 to 1937 in the 70 corporations studied. In 1930, 44 corporations of the 70 had a single general surplus figure and no other; in 1937 the number had dwindled to 8. In 1930, 26 corporations indicated an earned surplus figure. Many of these divisions are, presumably, arbitrary segregations of an old general surplus account.¹²⁷

BALANCE-SHEET ASSET FIGURES

Fixed Assets. The properties and resources of a business—the accountant's assets—are divided broadly by the accountant for reporting purposes into two major groups—fixed and current assets. Fixed assets include those assets which are held more or less permanently, are not for sale, and, excepting investments, ordinarily are consumed in the production of goods and services; their cost recovery is achieved only in the gross revenue received from the sale of such goods and services. Current assets, on the other hand, are assets which will be converted into cash or notes and accounts receivable in the forthcoming accounting period.

may contain the following provisions concerning the segregation of surplus: "That companies organized since January 1, 1928, give a complete segregation of surplus as between (a) paid in surplus, (b) surplus arising from revaluation of assets, (c) other capital surplus, and (d) earned surplus." Healy, "The Next Step in Accounting" (1938) 13 ACCOUNTING REVIEW 1, at 8.

¹²⁷ The following chart indicates the number of corporations disclosing the important surplus divisions:

Names of Surplus Accounts	Number of Companies	
	1930	1937
One Item, usually called "surplus"	44	8
Earned surplus	26	57
Capital surplus	12	30
Paid-in surplus	10	5
Revaluation	1	0
<i>Appropriated Surplus Reserve Accounts</i>		
Companies with one figure	23	16
Companies with reserves itemized	37	44
Companies with reserves included in Capital and Surplus section	6	3

Numerous other classifications of the resources of a business are possible, of course, but from the viewpoint of recording cost and income, and the presentation of the liquidity of the business, the almost universally employed categories of fixed and current assets are presently regarded as the most useful. As one might expect, however, there is no clean cut distinction between them, and accountants are troubled frequently by borderline items. A variety of rules of thumb exist which are employed in distinguishing the two classes.¹²⁸

Within the category of fixed assets, accountants crowd into a few simple sub-categories—land, buildings, equipment, and one or two other groupings¹²⁹—all of the phenomena of the physical and man-made world which pass in the market place. This compression of a world into three or four neat pictures is accompanied by an intellectual exploit through which the physical world is transmuted into dollar values; Michigan soil and Texas mules, by the use of a quantitative unit, are made comparable and sometimes identical.

¹²⁸ Paton, *Essentials of Accounting* (1938) 745, states that the principal tests used in distinguishing fixed and current assets are: " . . . degree of liquidity; (2) normal term or length of life; (3) rate of transfer to expense or loss; (4) technical character or method of use; (5) nature of business and intent of management."

¹²⁹ Instruction 1 to the Form A-1 balance sheet, under the Securities Act, requires a schedule indicating the major classifications of the plant, property, and equipment account. Similar segregation is required by Schedule II of Forms 10 and 10-K under the Exchange Act. Forms 10 and 10-K require that, where practicable, depreciation reserves shall be shown to correspond to classifications of property, "separating especially depreciation, depletion and amortization."

The following chart indicates the disclosure of these accounting requisites in the 70 corporations studied:

Fixed Assets and Related Reserves	Number of Companies	
	1930	1937
Single entry	8	0
Single entry (net)	4	2
One Figure and one Reserve	39	41
Itemized but no Reserve indicated	2	0
Itemized with one Reserve	8	11
Itemized with allocated Reserves	9	17
Reserve on Liability Side	14	6

All of this is presented in precise, unequivocal terms.¹³⁰

Since dollar symbols do not attach inherently to physical objects, some rational principle must be employed as the basis of making the transmutation.¹³¹ "Cost," "reproduction cost," and "sound value" or similar phrases attempting to express "current value"¹³² have been most widely used in accounting history. With few exceptions,¹³³ accountants deny that accounting should purport to set forth current values for fixed assets,¹³⁴ since it is almost impossible to attribute verifiable market or realizable values to specialized plant equipment permanently committed to a business. "Reproduction cost," at

¹³⁰ Compare Hamilton and Till, *supra* note 1.

¹³¹ A minimum of disclosure impels, regardless of the alternative employed, an adequate description of the basis used in recording fixed assets. In the recent delisting proceedings instituted against the Associated Gas and Electric Co., one of the deficiencies cited was the "failure to explain adequately the basis of determining" the amount of fixed assets. In the Matter of Associated Gas and Electric Co., Securities Exchange Act Release No. 1985 (January 13, 1939). In 1937, only 43 of the 70 annual reports examined contained any indication of the basis—not an impressive record. It was, however, a decided improvement over 1930 when only 21 of the 70 indicated the basis.

¹³² See May, "The Influence of Accounting on the Development of an Economy" (1936) 61 *J. of Accty.* 11, 17, pointing out that in a single act of the English Parliament the word "value" is said to have been used in twenty-seven senses.

¹³³ See May, *supra* note 130, at 15-21. There are a few dissenters, however. See Husband, "Accounting Postulates: An Analysis of the Tentative Statement of Accounting Principles" (1937) 12 *ACCOUNTING REVIEW* 386; Lorig, "Remarks on Tentative Statement" (1937) 12 *ACCOUNTING REVIEW* 401-3.

¹³⁴ The SEC has not as yet passed upon the question of whether a balance sheet, under the Securities Act, may include writeups, "based on a proper appraisal," of the increased value of assets over original cost. In the matter of Breeze Corporations, Inc., Securities Act Release No. 1786 (1938), a stop order proceeding, the Commission was faced with the question of whether the inclusion in the balance sheet of a substantial appreciation in the book value of registrant's intangibles was materially misleading. The Commission sidestepped the question of writeups since it found that the appraisal methods employed were arbitrary and unsound. See also, In the Matter of Unity Gold Corp., 1 SEC 25 (1934); In the Matter of Haddam Distillers Corp., 1 SEC 37 (1934); In the Matter of Continental Distillers and Importers Corp., 1 SEC 54, 79 (1935); and In the Matter of American Terminals and Transit Co., 1 SEC 701, 720 (1936).

best a factor of remote interest to investors, leads to a periodic revaluation of the assets with its attendant expenses, and involves accountants or appraisers in a highly speculative game of estimating what it would cost to reproduce a specific piece of property which no one is actually thinking of duplicating. The accountant finds it safest, therefore, to resort to historical cost figures, and accountancy becomes "... not essentially a process of valuation, but the allocation of historical cost and revenues to the current and succeeding fiscal periods."¹³⁵ As such, the dollar values attributed to fixed assets on the balance sheet must be viewed, not as an available source of funds for the business or an indication of what the corporation is "worth" as of the date of the accounting statement, but as charges to future operations whose predominating function is to insure cost recovery and a proper computation of income. Few investors appreciate that the asset figures must be interpreted so narrowly.¹³⁶

Thus the balance sheet, especially where fixed assets bulk large, is primarily an historical document reflecting original costs (or costs less depreciation). Such costs, at best, represent the "fair value" of the assets as of the date of *acquisition*. Frequently, however, they include sums "imprudently invested" in the business as a result of engineering mistakes, insiders' profits, and other elements. Original cost, while more objectively verifiable than the estimates of the appraiser, frequently is

¹³⁵ "American Accounting Association, Tentative Statement of Accounting Principles" (1936) 11 ACCOUNTING REVIEW 201.

¹³⁶ Financial analysts use capitalized earnings as their principal basis of judging the value of a business. Capitalized earnings, however, usually, except perhaps in the case of public utilities, bear little relation to either original costs, reproduction costs, or revaluation appraisals of the fixed assets. Accountants do not conceive it to be their function to correlate balance-sheet figures with capitalized earnings, or to note separately the latter on the balance sheet.

an elusive concept also, the contents of which vary according to purpose and definition. It may refer to the cost of construction to the builder or to the cost of acquisition to the owner to whose order it was made or to the cost of acquisition incurred by the present owner.¹³⁷ Thus any specific piece of property may have a number of "costs."¹³⁸ In accountancy, "original cost" or "historical cost" usually refers to the cost to the present owner, except in the public utility field where two sets of cost figures are required by state and federal commissions—"... cost of ... property to the person first devoting it to public service" and cost to the present owner.¹³⁹ Cost to the present owner rather than being a precise, ascertainable fact to be stated dogmatically on the balance sheet is often no more than an estimate. Where corporate stock is given in exchange for property, resort must be had to the "value" of the property or the stock to determine "original cost,"¹⁴⁰ and "value,"

¹³⁷ In the Matter of Breeze Corporations, Inc., Securities Act Release No. 1786 (1938), predecessor companies of the issuer effected substantial writeups by arbitrary appraisals of intangibles. The registrant's acquisition of these assets at the inflated figures was not an arm's-length transaction and the Commission held that the statement of the cost figures without the inclusion of an additional statement showing to what extent these figures represented writeups by the predecessor companies was materially misleading.

¹³⁸ 1 Bonbright, *Valuation of Property* (1937) 140-1.

¹³⁹ Federal Power Commission, *Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act* (1937) 6.

¹⁴⁰ In a number of cases under the 1933 Act the Commission has issued stop orders suspending the effectiveness of registration statements for securities of enterprises in the promotional stage on the grounds that the balance sheet did not properly record the cost or value of assets acquired through the issuance of securities. In each of these cases the Commission indicated that the basis for the asset figure should be "sound" appraisal methods competently and honestly applied or the fair market value of the stock at the time the property was acquired. See In the Matter of Unity Gold Corp., 1 SEC 25 (1934); In the Matter of Continental Distillers and Importers Corp., 1 SEC 54 (1935); In the Matter of Big Wedge Gold Mining Co., 1 SEC 98, 107 (1935); In the Matter of American Terminals and Transit Co., 1 SEC 701 (1936); In the Matter of Yumur Jute Mills Co., 2 SEC 81, 85 (1937); In the

as Bonbright has shown,¹⁴¹ is not a very clear concept. And where two properties are purchased jointly in a lump sum payment or where plant assets are constructed by the company itself, the difficulties of segregating the joint costs or allocating overhead requires resort to the techniques of appraisers or cost accountants; their resultant figures—a "fair allocation"—may be little more than shrewd guesses. Cost figures, furthermore, are usually stated minus accrued depreciation allowances, which means, of course, that the depreciated cost figures are subject to all of the judgment factors that enter into the estimate of the depreciation allowance. Struggles of public utility commissions with operating utilities and of the Interstate Commerce Commission with railroads in the determination of "original costs" indicate that more is involved here than specious fault finding. Investors cannot regard cost figures as mathematically precise quantities which do not include a complex of speculation and discretionary elements virtually inherent in the cost recording process.

Current Assets. Not all the assets of the corporation, however, are presented on the balance sheet at their historical cost. Under prevalent accounting practice, valuation enters in the representation of current assets. These assets consist of cash, realizable securities, and inventories intended to be converted into cash in the course of the year (items, unlike fixed assets, of estimable market value). The market value of these assets is of importance to creditors of the company, and, in view of their interests and the account-

ant's tradition of conservatism, no more than this value is frequently shown on the balance sheet. This is the well known rule of "cost or market, whichever is lower." A balance sheet, therefore, presents, at the very least, two "values." Apples and horses are added together, *mirabile dictu*, but the result is neither four apples nor four horses but a very strange medley of the two. An identical pecuniary symbol attributed to each obscures the working of this magic. And no balance sheet exhibits as few as two different bases of values. Frequently, distinct categories of items in inventory will be represented at different bases on the same balance sheet.¹⁴² Investment securities, securities of affiliates, marketable securities may not be valued by the same criterion.¹⁴³ As we have seen, "cost" itself is far from being a readily determinable unitary concept. On a single balance sheet, reflecting a long corporate history, "cost" may be used in a number of different senses. This may be and frequently is true in a single balance sheet of all the other bases used in determining the value of assets.¹⁴⁴ In view of these circumstances, inherent in an all-purpose balance sheet called upon to serve the divergent functions of internal control, interests of creditors, taxation, and reports to stockholders, investors must regard the "total

¹⁴¹ As in the 1937 balance sheets of such corporations as American Sugar Refining Co.; Holly Sugar Corp.; Armour & Co.; Federal Mining and Smelting Co.; Columbia Oil and Gas Corp.; Baldwin Locomotive Co.; Warner Bros. Pictures, Inc.; May Department Stores Co.

¹⁴² Paton, *Accountants' Handbook* (1934) 319, lists the following principal bases of security valuation for accounting purposes: "(1) Actual cost or amount invested; (2) market price; (3) appraised or estimated value; (4) value on issuing company's books; (5) cost modified by accumulation or amortization; (6) maturity value."

¹⁴³ Doran, "The Impact of Economics on Accounting" (Jan. 1939) *Edison Inst. Bull.* 26, 28; Committee of American Institute of Accountants on Cooperation with Stock Exchanges, Reports to Stockholders (1932) 6 [Reprinted in 1 May, *Twenty-Five Years of Accounting Responsibility* (1937) 115]. In addition, adjustments for price level changes are seldom made.

Matter of National Boston Montana Mines Corp., 2 SEC 226, 250 (1937); In the Matter of Rickard Kamore Gold Mines, Ltd., 2 SEC 377, 389 (1937); In the Matter of Bering Straits Tin Mines, Inc., Securities Act Release No. 1498 (July 2, 1937); and In the Matter of Virginia City Gold Mining Co., Securities Act Release No. 1615 (Nov. 16, 1937).

¹⁴⁴ Bonbright, *Valuation of Property* (1937).

assets" figures of a corporation with substantial skepticism.

Current assets, representing the working capital of the business, are the most significant items on the balance sheet to management, investors, and creditors. The questions arising in their disclosure, from the investors' viewpoint particularly, are: what items are to be included in this category (basis of classification), what basis of "value" should be used in computing each category of items, and the extent of the disclosure necessary to serve the investors' needs.¹⁴⁵

Accounting literature indicates that many companies exclude all items from current assets which are not readily convertible during the course of a year. But this rule is by no means followed universally.¹⁴⁶ An investor is interested in knowing the company's particular scheme of classification (it may have one which is no more than a very rough working rule) in order to evaluate its current credit position in the light of the highly significant ratio of current assets to current liabilities, and other ratios,¹⁴⁷ and the current credit position of competitors. Disclosure is also of value in inducing the corporation to use the same basis for current liabilities as for current assets—a necessary step in the analysis of the current credit position. Under both Securities Acts, the Commission regulations provide that "items classed as current assets should be generally realized within one year," but "generally

recognized trade practices with respect to individual items, such as installment receivables or inventories long in process are admissible, provided such trade practices are stated."¹⁴⁸ The word "generally," while probably a necessary grant of discretion, may permit items to enter which would distort an investor's estimates. But while the Securities and Exchange Commission may consider basis of classification of current assets a significant item of disclosure, not a single corporation of the seventy studied, in either 1930 or 1937, revealed its basis of classification for either current assets or current liabilities.

Marketable Securities. When this item is included in current assets, it should represent only securities having a ready market, which can be liquidated without a material impairment of their values.¹⁴⁹ Since this item figures so largely in the analysis of current assets, it is desirable that the basis of determining the balance sheet amount be shown. The Securities and Exchange Commission requires that if the amount is not shown on the basis of current market, such aggregate amount should be stated parenthetically.¹⁵⁰ Of the 70 corporations studied, only 23 indicated the basis in 1930; by 1937, the number had

¹⁴⁵ Form 10-K, Instructions, at 14.

¹⁴⁶ "Include only securities having a ready market. State in the balance sheet the basis of determining the balance sheet amount and, if not shown on the basis of current market quotations, state such aggregate amount parenthetically." Form 10-K, Instructions, 14. It is understood that the proposed new forms contain a provision requiring in addition a parenthetical statement of the original cost of the securities.

Professors Sanders, Hatfield, and Moore indicate an additional requirement: "this market should be sufficiently stable to absorb an orderly liquidation of the particular securities held by the company without materially impairing the currently quoted values, or at any rate without reducing them below the prices at which the company carries them in its balance sheet." Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 72. Thus DuPont de Nemours & Co. does not list its vast holdings in General Motors as a current asset. See, also, Accounting Series, Release No. 7; and *In the Matter of American Gyro Co.*, 1 SEC 83, 87 (1935).

¹⁴⁷ Form 10-K, Instructions, at 14, quoted *supra* note 147. Forms 10 and A-2 contain similar instructions.

¹⁴⁸ Even in regard to this very significant figure, there were six companies in 1930 and two in 1937 which did not give a total for current assets. In 1930, nine companies included obviously improper items such as treasury stock and bonds; and in 1937, eight companies made such improper inclusions. The SEC has found similar deficiencies. Accounting Series, Release No. 7 (May 16, 1938) 3.

¹⁴⁹ See Sanders, "Reports to Stockholders" (1934) 9 ACCOUNTING REVIEW 201, 208.

¹⁵⁰ See Graham and Katz, *Accounting in Law Practice* (1932) 168; Bowman, "Reporting upon the Corporate Investment" (1938) 65 J. of Acctg. 396, 407-10. On investment analysis ratios generally, see authorities cited *supra* note 44.

jumped to 48. Great diversity exists in the basis employed.¹⁵¹

Notes and Accounts Receivable. Since notes and accounts receivable appear as a current asset on the balance sheet, they should consist of items which, normally, will be liquidated in the regular course of business during the succeeding fiscal year. Receivables from officers, employees, and parent and subsidiary companies, if included, should be listed separately. Such receivables have a long record of abuses in corporate history and experience has shown that they often remain on the books for years. Inclusion of these items in current assets may thus result in an overstatement of the current position. Where significant differences in the light of trade practices exist, notes and accounts receivable should be listed separately. The Securities and Exchange Commission permits the consolidation of the two items under the Exchange Act, but requires detailed segregation under the Securities Act.¹⁵²

Adequate reserves should be set up, as a deduction from listed assets, "to cover any difference between the book amount and reasonably probable realization."¹⁵³ The judgment of management and its

accountants in the light of current conditions and the company's past experience will determine the margin.¹⁵⁴ Normally, unless warranted by increasing volume of sales on credit or greater anticipated losses, the reserve, unlike the depreciation reserve, should not increase from period to period, since it is considered applicable to existing and presumably collectible receivables only. Such an increase may indicate that a "secret" reserve is being created. Unless a company has a background of dissimilar results in the collection of notes as distinguished from accounts receivable, there is little point in setting up a separate reserve for each. Few accountants would disagree, in principle, with these working rules.

Of the 70 corporations studied, 34, in 1930, presented a single figure for both notes and accounts receivable, and 24 of the 70 did not provide a reserve. In 1937, 23 corporations presented a single figure for both accounts and 19, despite the standard of accounting practice prescribed by the SEC did not disclose a reserve.¹⁵⁵

Inventories. In view of its importance in the analysis of the current credit position of the company and in the determina-

¹⁵¹ In a study of 155 balance sheets and income statements published in 1934, the valuation of marketable securities was as follows: "No basis indicated, 54; cost, 50; market, 28; 'cost or market,' 10; miscellaneous, 13; a total of 155. Among the miscellaneous bases were: book value; lower than cost; subject to a 'reserve'; lower of par or market; listed securities 'at market,' unlisted at 'cost'; par; below market; bonds 'at par,' stocks 'at par,' stocks 'at market.'" Daniels, "Corporation Financial Statements" (1934) 6 *Michigan Business Studies* 51, n. 1.

¹⁵² The instructions to Forms 10 and 10-K permit "Notes and Accounts Receivable" to be combined. Instructions, at pages 17 and 15, respectively. Form A-1, Item 54, requires segregation in considerable detail, and apparently segregation is also required in Form A-2. Form A-2, Instructions, p. 31. In the tentative drafts of the proposed new forms, trade notes and accounts receivable are to be segregated, but a consolidated reserve is permitted.

¹⁵³ Sanders, Hatfield and Moore, *A Statement of Accounting Principles* (1938) 73.

¹⁵⁴ There are two generally accepted methods of determining the amounts of the annual allowances for losses from uncollectibles. One is by analyzing the individual accounts and the other is by basing the allowance upon the general past experience of the company. See Paton, *Essentials of Accounting* (1938) 411 *et seq.*

¹⁵⁵ The statistics for notes and accounts receivable and related reserves of the 70 corporations are as follows:

How Disclosed:	Number of Companies	
	1930	1937
Single entry ("net" not indicated)	16	4
Single entry ("net" indicated)	8	15
One entry and one reserve	10	9
Itemized but no reserve	15	2
Itemized and one reserve	17	30
Itemized and allocated reserves	3	8
Reserves on liability side	25*	3†

* In 1930, two companies had the reserve separated, ten mentioned doubtful accounts in the name of the entry, and thirteen had reserves for contingencies with no mention of doubtful accounts.

† Three companies listed reserves for contingencies with no mention of doubtful accounts.

tion of income, full disclosure of information as to inventories is of material benefit to the investor-analyst. In addition to the desirability of segregation of major classes of inventories which is required by the Securities and Exchange Commission,¹⁵⁶ the investor is primarily interested in the bases used in the determination of the valuation of inventory. There are numerous possibilities: cost, replacement cost (market), cost or market whichever is lower, base stock, selling price, retail method, and others. The same corporation may, and frequently does employ a different basis for distinct items in the inventory.¹⁵⁷ And the same basis because of the nature of the materials with which it is concerned, means something entirely different with varying items in the inventory.¹⁵⁸

The particular inventory method chosen has an important effect in the determination of income. "Cost or market, whichever is lower," perhaps the most widely used method,¹⁵⁹ seems to have been adopted in this country on the advent of the Federal Income Tax law, largely as an immediate method of reducing taxable income.¹⁶⁰ But the accountants who adopted it for this purpose were short-sighted. While the method results in an understatement of income in the first period, it causes an overstatement in the very next.¹⁶¹ Either may have serious consequences for an investor.

¹⁵⁶ Form 10-K, Instructions, at 15.

¹⁵⁷ Examples are found in the 1937 annual reports of American Sugar Refining Co., Holly Sugar Refining Co., Firestone Tire & Rubber Co., Bethlehem Steel Corp., Pittsburgh Coal Co., Columbia Oil & Gasoline Corp., and others.

¹⁵⁸ See Paton, *Accountants' Handbook* (1934) 418, 420.

¹⁵⁹ Of the 70 annual reports studied, 39 in 1930 and 45 in 1937 employed the "cost or market" method.

¹⁶⁰ Paton, "Comments on A Statement of Accounting Principles" (1938) 65 *J. of Accty.* 196, 202.

¹⁶¹ See Graham and Katz, *Accounting in Law Practice* (1932) 191; Paton, "Comments on A Statement of Accounting Principles" (1938) 65 *J. of Accty.* 196, 203; and Barr, "Comments on A Statement of Accounting Principles" (1938) 65 *J. of Accty.* 319-23.

Andrew Barr has shown that under the first-in, first-out method of determining cost advocated by Paton, higher profits are noted in the income statement with rising price levels and lower profits with falling prices.¹⁶² These gains and losses are "realized" gains and losses only if the fiction of first-in, first-out is not questioned. The replacement cost method (market), however, in its own way, clearly results in the inclusion of unrealized profits in the case of rising prices and losses not incurred in the case of falling prices. A growing school of accountants and economists are now advocating adoption of such methods as the base-stock method, the last-in, first-out, and the inventory reserve method as more satisfactory means of eliminating fictitious gains and losses.¹⁶³

In view of the important differences in the statement of income resulting from the adoption of one method rather than the other, an investor cannot "give the same weight to profits of companies in the same business without knowing whether the profits to which their calculations are applied have been computed on the same basis or how great the effect of a difference in method might be."¹⁶⁴ Few investors, and not all accountants, seem to realize this fact. And even when the same basis is employed in estimating distinct items in the inventory of the same company or where the same basis is employed by two different concerns, results may be far from uniform.

A "cost" of an individual item in the inventory seems a simple matter to determine. But so simple a word turns out to be the most generic of concepts, and its

¹⁶² Barr, "Comments on A Statement of Accounting Principles" (1938) 65 *J. of Accty.* 319-23.

¹⁶³ Fictitious inventory profits have serious economic consequences. See Arthur, "Inventory Profits in the Business Cycle" (1938) 28 *Am. Econ. Rev.* 27-40.

¹⁶⁴ May, "Influence of the Depression on the Practice of Accountancy" (1932) 54 *J. of Accty.* 336 [Reprinted in 1 May, *Twenty-Five Years of Accounting Responsibility* (1937) 87].

estimation creates endless difficulties for the accountant. Investigators for the Bureau of Internal Revenue in 1919 discovered, for example, that it meant very little to note that a particular company was on a "cost" basis; the nature of the basis could only be brought out by a careful study of the theories and procedures adopted by the management in working up its estimate.¹⁶⁵ First is the question of how cost is to be defined. It usually includes invoice price, transportation charges, handling prices, and insurance. Sometimes buying expenses and unpacking costs are added. There is also the very difficult task of allocating costs to specific items in instances of joint products and by-products. The highest arts of the cost accountant may produce no more than an arbitrary division. The second major question which arises is what method is to be used in determining invoice costs. Many methods, each producing different results, compete for attention: first-in, first-out; last-in, last-out; average cost; weighted average cost; base stock method; actual cost of specific lots on hand, and others. Mere enumeration of these competing methods indicates some of the difficulties inherent in cost determination. Almost equal difficulties exist in the determination of the other available bases of inventories.¹⁶⁶

The SEC, thus far, has adopted no rules on inventory valuation other than to require a statement of the method of valuation adopted by the company.¹⁶⁷ William

Werntz, Chief Accountant of the SEC, reports that practically all of the generally recognized methods of inventory valuation have been used by one company or another in the statements filed, and that the Commission seldom has found occasion to object to the use of any particular system.¹⁶⁸ Werntz, however, has expressed serious doubts as to whether the mere designation of the system followed—"cost or market," for example—constitutes sufficient disclosure.¹⁶⁹ The apparent solution is to call for more detail, but the problem is not so easily disposed of. As Werntz reports:

"When a requirement was proposed calling for a clear indication of what was meant by cost or market, numerous commentators made the point that if the operations of a company were at all complex, several pages of explanation would be required by reason of the use of diverse methods. Others indicated that not much less than a text on cost accounting would suffice to illumine 'standard' costs. . . ."¹⁷⁰

Instructions, p. 17; and Form 10-K, Instructions, p. 15. It is understood that the proposed revision of accounting forms requires, in addition, a description of the basis to the extent practicable.

¹⁶⁵ Werntz, "An Approach to Accounting Problems" (An Address delivered before the Indianapolis Chapter of the National Association of Cost Accountants on December 14, 1938; before the Illinois Society of Certified Public Accountants on December 16, 1938) 7.

¹⁶⁶ *Ibid.*

¹⁶⁷ *Ibid.* Consistency in the application of a particular method from year to year and a clear indication in the company's accounting statements of any changes in method from year to year may provide more protection to the investor than attempts at detailed description of the method employed. The Bureau of Internal Revenue's regulations, designed, of course, clearly to reflect income for income tax purposes, do not prescribe specific methods to be followed, admitting that "inventory rules cannot be uniform." The emphasis is on consistency, and ". . . greater weight is to be given to consistency than to any particular method of inventorying or basis of valuation so long as the method or basis used is substantially in accord with these regulations." Treasury Regulations 94, Art. 22(c)-2. The Bureau, however, is interested in the income, from year to year, of individual businesses only. Consistency in the application of a particular method over a period of years will, theoretically at least, result in the ultimate absorption of *fictional* inventory profits or losses produced by a method in a particular year. Investors, however, have a broader interest. They are interested in a method of inventorying which reflects most fairly the inventory for the *particular* year since they may decide to buy or

¹⁶⁵ Paton, *Accountants' Handbook* (1934) 423-4.

¹⁶⁶ See Paton, *loc. cit.*, *supra* note 156. For variations in the meaning of "market" see "The Valuation of Inventory," in "Report of the Special Committee on Inventories to American Institute of Accountants" (1938) 65, *J. of Acct.* 29, 30.

¹⁶⁷ The forms require: "State separately in the balance sheet, or in a schedule therein referred to, major classes of inventory such as (a) raw materials; (b) work in process; (c) finished goods; (d) supplies, and the basis of determining the amounts shown in the balance sheet. Any other classification that is reasonably informative may be used." Form A-2, Instructions, p. 31; Form 10,

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What does all this mean to the investor? First of all, he must learn to be extremely cautious and skeptical in his use of inventory figures both for credit ratios and for comparative purposes with corporations in the same industry. Secondly, he must not place too much faith in the disclosure of the basis of valuation since the nature of anyone of the bases varies so greatly depending upon the method and procedure employed, and the item with which it is concerned. Inventory figures, as so many other figures in accounting, must be taken as broad, loose estimates, as (if the procedure and theories followed were acceptable) one of a number of alternative pecuniary valuations attributable to the units of goods in the inventory. Accounting technique in its present stage of development cannot do more than this.

Disclosure of an accepted basis, however, assuming that the basis has been followed honestly and with an effort at consistency from year to year, does give an investor an opportunity to make his rough calculations; looseness of concept does not imply that concepts are not valuable. While 1937 shows some improvement over 1930 in disclosure of the basis of inventory figures, the record is not altogether clean.¹⁷¹

THE NEED FOR "SINGLE-PURPOSE" STATEMENTS

Reports to stockholders, whether judged

sell on the basis of the income statement for the particular year. Furthermore, they are interested in a greater uniformity of inventory methods from corporation to corporation and more detailed disclosure of the methods followed so that a basis of comparison of operating results of different corporations is available.

¹⁷¹ Presentation of Inventory figures:

	Number of Companies	
	1930	1937
Inventory Itemized with Amounts Indicated.....	16	17
<i>Basis Employed:</i>		
Not indicated.....	19	5
Cost.....	8	6
Cost or Market.....	39	45
Miscellaneous.....	6	16

by the standards set by the SEC or by one's own lights, seem very inadequate. On vital counts, investors are left conjecturing—sales, cost of sales, depreciation, inventories and surplus generally are so inadequately described that an investor does not have a minimum of information upon which to form an intelligent opinion on buying or selling.¹⁷² The seventy corporations included in this study represent the best in American reporting practice, yet their accounting to stockholders falls far short of the minimum requirements which these very corporations must meet in their reports to the SEC. Unless accounting morality with respect to annual reports to stockholders improves substantially within the next few years, imposition of standards of conduct by the SEC seems necessary in the interest of the shareholding public.

Accounting conventions and rules of thumb attempt to bring "a sprawling domain of unsubdued facts"¹⁷³ and an almost infinite number of individual transactions into clean-cut, neat categories each denominated with some pecuniary value. Classification of these myriad and individualized events into categories and sub-categories—the components of which bear to the observer some similarity to each other—is, of course, essential if the phenomena of modern business are to be controlled. The types of classifications and categories developed in any discipline—and accounting is not an exception—are the products of a long evolution; the reasons for their origin, usually unknown

¹⁷² The Twentieth Century Fund came to a similar conclusion: "... We have found that, despite some improvement during the past few years, a majority even of those companies whose issues are listed on the New York Stock Exchange do not disclose enough information to render their balance sheets and income accounts intelligible to the average, well informed investor." Twentieth Century Fund, *Security Markets* (1935) 601.

¹⁷³ Hamilton, "Cost as a Standard for Price" (1937) 4 *Law and Contemp. Prob.* 321.

to us now, may have been to serve some temporary convenience or more persistent business need. Their survival today in accounting practice is not conclusive of their survival value for all accounting purposes.

Most of the classifications in accounting are broad and generic—very loose, abstract words and phrases into which we attempt to pack the divergent transactions of business life. Like most abstractions, they have no "real meaning" apart from concrete situations and specific purposes for which the abstraction is being employed. No single definition of "value," for example, however convenient and simplifying it might be, can describe the word's changing meanings with changing purposes. "Value" for rate making purposes is a term meaningless to anyone unfamiliar with the struggles in American public-utility law.¹⁷⁴ The accountant's "valuation" of inventories at "cost or market, whichever is lower," makes sense only in the light of its use by "conservative" accounting practice to report the accountant's "realized income." Another set of "values" used by the accountant, "historical costs," is meaningful only in the light of the accountant's conception of his function as a reporter of "the allocation of historical costs and revenues to the current and succeeding fiscal periods."¹⁷⁵

A fuller realization by accounting practitioners and teachers of the generic nature and purposive character of accounting categories should lead to a paring off of the broader concepts, the elimination of those which are meaningless or which no longer serve specific needs adequately, an application of existing concepts and the formulation of new ones in terms of specific situations and specific functions, and

to a healthy skepticism to counteract the appearance of certitude induced by mathematical symbols. More concretely, it should lead to a realization that accounting rules designed to serve the interests of management in private business may reflect, inadequately and unfairly, the interests of employees, consumers, and the public in the enterprise, and that such rules may be rather irrelevant as applied to the fiscal activities of a government.¹⁷⁶ It should lead, further, within the precinct of accounting for management, to a far greater development in the preparation of accounts for specific purposes—to "single-purpose" statements, varying according to the purpose for which they are prepared. A statement which attempts to account for the money presently invested in the business and to record costs during each income period—the historical balance sheet—cannot serve the purpose of determining the "present financial worth" of a business; and rules designed to insure adequate tax returns, or rate control, or internal control for management, or to reflect liquidity for creditors—all intermingled in the present "all-purpose" balance sheet—hardly suffice to guide an investor in his trading of securities.¹⁷⁷ Professor Bonbright has indicated the technique for the development of the functional account:

"It is to be hoped that the accounting profession will give far more attention than it has heretofore given, to the effect on the 'proper' balance sheet and earnings statements of the specific purposes for which these financial documents are customarily used. A good beginning could be made by assuming, first, that no use will be made of the company's reports except by buyers and sellers of the corporate stock. In the light of this single assumed objective, all of the alternative procedures of accounting, such as

¹⁷⁴ See 2 Bonbright, *Valuation of Property* (1937) 1168.

¹⁷⁵ "American Accounting Association, A Tentative Statement of Accounting Principles" (1936) 11 ACCOUNTING REVIEW 187.

¹⁷⁶ See note 23, *supra*.

¹⁷⁷ See, as expressive of another point of view, Berle, "Accounting and the Law" (1938) 13 ACCOUNTING REVIEW 9.

the valuation of fixed assets at original cost versus replacement cost, the use of straight-line versus sinking-fund method of depreciation, the booking of current assets at cost versus the lower of cost and market, and so forth, might be subjected to a critical rating of their relative merits. This task having been accomplished, the accountant might then forget the stockholder and assume that an 'ideal' set of financial reports is such a set as will best fit the needs of the credit department of a commercial bank. Still other objects . . . would be taken up in turn. The result of this inquiry would be the creation of standards for 'single-purpose' balance sheets and earnings statements. Further research would consider the question whether a workable multiple-purpose scheme of accounts might not be so devised that, by the aid of pencil and paper, a reader could reconstruct the accounts to fit his own requirement.¹⁷⁸

¹⁷⁸ 1 Bonbright, *Valuation of Property* (1937) 253-4.

The SEC has accepted the all-purpose accounting categories as sufficient for investors and has confined its role to an insistence upon more adequate disclosure within the framework of those categories and upon a conformance with the standards of accounting conduct recognized by the better textwriters and more careful practitioners. Almost alone of all agencies—governmental or private—the SEC has the resources, staff, and sanctions where necessary, to undertake the work of a reclassification of business data pointed toward the needs of stockholders and investors. If the exploratory remarks in this essay are well conceived, investors and the general public will inevitably benefit if the SEC finds it possible to undertake this task.

TIME AS A FACTOR IN DETERMINING DEBT-PAYING ABILITY

F. W. WOODBRIDGE

DURING the last year and a half a small group have been considering the practicability of a statement which would clearly indicate whether a concern could pay its short-term debts when due. This consideration has led on to other related problems and considerations, and finally to a certain amount of experimental research.

A brief review of the statistics of business discontinuances would seem to justify such research. From the beginning of this century business discontinuances have ranged from roughly 250,000 to nearly 500,000 listed concerns each year.¹ This tremendous mortality, with its imposing losses (both direct and indirect), mounting

during these years at least into the tens of billions of dollars, has an important effect upon our economic, cultural, and social development. Our analysis has attempted to deal only with the immediate causes of this mortality without at this time considering the innumerable contributing causes.

It has seemed that in the great majority of cases the focal point of business mortality is the actual or prospective inability of a concern to pay its debts. If this simple hypothesis be accepted it seems that the financial health of a business may be measured in terms of the distance that a concern is from this focal point of mortality. As a corollary it would also seem that definite evidence of financial ill health is indicated when a business is unable to pay its debts *when they are due*.

Although a reasonably clear and under-

¹ Excluding financial institutions, railroads, professional enterprises, and farmers. Source, charts prepared by Dr. Willard Thorp of the Department of Commerce.

standable presentation of a concern's ability to pay its debts when due seems desirable information which might be supplied by the accountant, no such simple presentation exists except when the cash and negotiable securities listed on the balance sheet are approximately equal to or in excess of the current liabilities, a condition which is enjoyed by only a few concerns. In the great majority of cases even the most rigorous classification of current assets and current liabilities fails to reveal whether a business can actually pay its short-term debts when they are due because it does not indicate whether the realization of assets will be sufficiently rapid to meet the agreed liquidation dates of the liabilities. There are many examples of concerns whose balance-sheet showing appeared quite satisfactory at the beginning of a fiscal period but which were in the hands of creditors' committees or bankruptcy courts before the year ended.

Various ratios, percentages, and turnover figures have been developed to assist those whose duty it is to determine debt-paying ability. The researches of Alexander Wall, Dun & Bradstreet, Inc., and others have advanced the usefulness and understanding of these procedures and have contributed much to credit economy—these formulae today constitute the main tools of the statement analyst.

However, ratios, percentages, and turnover figures as now used have certain very definite limitations—they can be used effectively only by those who have had considerable training and experience in this field, and are often grossly misleading to those lacking this training and experience (for instance, the uncritical application of the naive concept that a 2:1 current ratio is always satisfactory). Furthermore, the various percentages, ratios, and turnover figures are not susceptible of a coördination which will present a combined or consolidated picture of debt-

paying ability. Despite these limitations, it must be repeated that when used by trained interpreters these formulae are extremely valuable for the "outside" analyst who does not have access to the original data and who is limited in his direct analysis to the relationships existing between figures appearing on the statements.

The "insiders," on the other hand, who are even more vitally concerned with the financial condition of the business than are the creditors, need not be limited in their analysis to the information presented on the statements. They have access to all of the financial data, and the value of an analysis which would give to these "insiders," particularly to the financial controller, a simple monthly schedule showing probable debt-paying ability in an understandable form seems unquestionable. Such a schedule in a tentative form is presented in Figures 1, 2, 3, and 9.

The basis of this schedule is the concept that the assets and liabilities, particularly the current assets and liabilities, presented on an ordinary balance sheet may be compared to the gears in an automobile. Each gear transmits a certain amount of power, depending upon its size and velocity, or rate of turnover. Similarly, each asset and liability has both size and velocity, or rate of turnover, and delivers or receives a certain amount of debt-paying power. The assets transmit values directly into cash or into some other asset. This other asset may be larger or smaller in amount and may have an entirely different volume of debt-paying power according to its size and velocity, or rate of turnover. On the other hand each item in the liability section absorbs debt-paying power according to its size and velocity, or rate of turnover. Viewed in this manner, debt-paying ability is dependent upon a proper synchronization of the size and velocity, or rate of turnover, of these various units

THE X Y Z STORE BALANCE SHEET, NOVEMBER 30, 1937*

ASSETS		LIABILITIES	
CURRENT ASSETS		CURRENT LIABILITIES	
Change Funds.....	\$ 120.00	Bank Overdraft.....	\$ 1,384.77
Returned Checks.....	36.00	Accounts Payable.....	49,819.41
Accounts Receivable.....	\$10,782.54	Automobile Letter of Credit.....	2,490.72
Less Reserve for Bad Accounts.....	1,247.67	Notes Payable.....	10,500.00
	9,534.87	Accrued Liabilities.....	3,099.57
Balance on "Will Calls".....	4,748.91	OTHER LIABILITIES.....	\$ 67,294.47
Inventories.....	120,168.03		14,870.52
DEFERRED CHARGES.....	1,995.24	PROPRIETORSHIP	
ACCURED INCOME.....	1,422.96	CAPITAL, NOVEMBER 30, 1937.....	107,266.05
FIXED ASSETS (Net).....	16,434.63		\$189,431.04
OTHER ASSETS.....	34,970.40		
	\$189,431.04		

SYNCHRONIZATION SCHEDULE

ASSETS		LIABILITIES	
EXPECTED REALIZATION		DUE DATES	
Within 30 Days		Within 30 Days	
Returned Checks.....	\$ 36.00	Bank Overdraft.....	\$ 1,384.77
Accounts Receivable.....	4,744.32	Accounts Payable—	
Balance on "Will Calls".....	4,344.48	Trade.....	36,405.36
Inventory.....	31,201.47	Other.....	3.93
	\$40,326.27	Automobile Letter of Credit.....	172.83
		Notes Payable.....	3,000.00
		Social Security Taxes.....	164.91
		Accrued Expenses.....	1,346.04
			\$42,477.84
30 to 60 Days		30 to 60 Days	
Accounts Receivable.....	1,833.03	Accounts Payable—	
Balance on "Will Calls".....	404.43	Trade.....	12,135.12
Inventory.....	14,950.17	Notes Payable.....	4,500.00
	17,187.63	Sales Tax Accrued.....	1,588.62
		Automobile Letter of Credit.....	172.83
			18,396.57
60 to 90 Days		60 to 90 Days	
Accounts Receivable.....	1,293.90	Automobile Letter of Credit.....	
Inventory.....	11,665.47		172.83
	12,959.37		
More than 90 Days		More than 90 Days	
Change Funds.....	120.00	Other Accounts Payable.....	1,275.00
Accounts Receivable.....	1,663.62	Notes Payable.....	3,000.00
Inventory.....	62,350.92	Automobile Letter of Credit.....	1,972.23
	64,134.54		6,247.23
	\$134,607.81		\$ 67,294.47

* Taken from the research studies of J. R. Zazueta, B.S. in B.A.
Actual figures have been coded to avoid possible identification.

FIGURE 1

on the two sides of the balance sheet. In other words, the sufficiency of cash with which to pay debts is dependent upon the size and velocity, or delivering power, of the assets in relation to the size and velocity, or consuming power of the lia-

bilities. This being the case, the problem of measuring debt-paying ability on the date of a given balance sheet has been conceived as a problem of first, classifying the due dates of the current liabilities to determine their size and velocity, or rate

MACHINE PARTS CO. BALANCE SHEET, NOVEMBER 30, 1937*

ASSETS	LIABILITIES
CURRENT ASSETS	CURRENT LIABILITIES
Accounts Receivable— Trade.... \$19,846.44	Bank Overdraft..... \$ 649.32
Less Reserve for Bad Accounts. 599.10	Accounts Payable..... 8,253.45
	Contracts Payable..... 814.50
	Notes Payable..... 21,188.85
	Accrued Liabilities..... 2,210.82
	\$33,116.94
C.O.D.'s..... 1,894.14	
Merchandise Inventories.. 28,407.48	
DEFERRED CHARGES..... 2,539.08	
FIXED ASSETS (Net)..... 30,375.03	
OTHER ASSETS..... 3,176.91	
	PROPRIETORSHIP
	CAPITAL, NOVEMBER 30, 1937..... 52,523.04
	\$85,639.98
	\$85,639.98

SYNCHRONIZATION SCHEDULE

ASSETS	LIABILITIES
EXPECTED REALIZATION	
Within 30 Days	Within 30 Days
C.O.D.'s..... \$ 1,894.14	Bank Overdraft..... \$ 649.32
Accounts Receivable.... 13,892.52	Accounts Payable..... 8,253.45
Inventories..... 4,350.99	Contracts Payable..... 307.95
	Notes Payable..... 2,850.00
	Taxes Accrued..... 1,707.84
	\$13,768.56
30 to 60 Days	30 to 60 Days
Accounts Receivable (Net)..... 5,354.82	Contracts Payable..... 198.60
Inventory..... 10,882.83	Notes Payable..... 2,100.00
	Accrued Items..... 502.98
	2,801.58
60 to 90 Days	60 to 90 Days
Inventory..... 13,173.66	Contracts Payable..... 157.95
	Notes Payable..... 1,950.00
	2,107.95
	More than 90 Days
	Contracts Payable..... 150.00
	Notes Payable..... 14,288.85
	14,438.85
TOTAL CURRENT ASSETS..... \$49,548.96	TOTAL CURRENT LIABILITIES..... \$33,116.94

* Taken from the research studies of J. R. Zazueta, B.S. in B.A.
Actual figures have been coded to avoid possible identification.

FIGURE 2

of consuming power; and second, classifying the expected realization dates or rate of delivering power of the assets, more particularly the current assets, to ascertain if on the balance sheet date there is a justifiable cash expectancy with expected realization prior to and in excess of the liabilities to be liquidated.

An interesting comparison of the information which may be gained from ordinary balance sheets and the information available when this additional data is used may be observed by reviewing the con-

densed balance sheets and the schedules which are presented in Figures 1 and 2.

It is obvious from an inspection of these balance sheets that each concern should be carefully investigated before additional commitments are considered, for:

1. Each has overdrafts.
2. Each has a questionable current ratio.
3. Ninety per cent of the XYZ Store's current assets is composed of in-

The XYZ Store 2+1
The Machine Parts Co. 1.5-1

JOHNSON'S LUSCIOUS LUNCH.* BALANCE SHEET, AUGUST 31, 1938					
ASSETS			LIABILITIES		
CURRENT ASSETS			CURRENT LIABILITIES		
Cash.....	\$ 2,769		Trade Creditors.....	\$ 1,771	
Inventory.....	<u>1,614</u>	\$ 4,383	Contracts Payable.....	1,680	
ADVANCES TO EMPLOYEES.....	19		Notes Payable.....	3,112	
DEFERRED CHARGES.....	<u>1,009</u>		Accrued Expenses.....	<u>1,826</u>	\$ 8,389
FIXED ASSETS					
Equipment.....	26,908		PROPRIETORSHIP		
Less: Reserve for Depreciation.....	<u>4,340</u>	22,568	ALBERT JOHNSON, CAPITAL.....	19,590	
		<u>\$27,979</u>			<u>\$27,979</u>
SYNCHRONIZATION SCHEDULE					
ASSETS			LIABILITIES		
EXPECTED REALIZATION			DUE DATES		
Within 30 Days			Within 30 Days		
Cash.....	\$ 2,769		Trade Creditors.....	\$ 1,771	
Inventory.....			Contracts Payable.....	136	
(Approximately 2 days supply).....	<u>1,614</u>	\$ 4,383	Notes Payable.....	750	
			Accrued Expenses.....	<u>523</u>	\$ 3,180
30 to 60 Days			30 to 60 Days		
			Contracts Payable.....	136	
			Notes Payable.....	750	
			Accrued Expenses.....	<u>1,303</u>	2,189
60 to 90 Days			60 to 90 Days		
			Contracts Payable.....	136	
			Notes Payable.....	750	886
Over 90 Days			Over 90 Days		
			Contracts Payable.....	1,272	
			Notes Payable.....	<u>862</u>	2,134
		<u>\$ 4,383</u>			<u>\$ 8,389</u>

NOTE: Summary Analysis of Current Operations:

Current Sales approximately \$15,000 a month with an average net profit of 11.6 = \$1,740
Monthly Depreciation Charges..... 475

Expected Free Income available monthly for liability liquidation..... \$2,215

* Taken from the research studies of J. R. Zazueta, B.S. in B.A.
Actual figures have been coded to avoid possible identification.

FIGURE 3

ventory. This may indicate either strength or weakness on this particular date, depending upon the volume of the Christmas trade.

4. Sixty-three per cent of the current liabilities of the Machine Parts Co. is made up of notes payable, indicating either a prolonging of ordinary short-term credits or heavy inroads on working capital through bank loans.

When the current assets and the current

liabilities are analyzed and Synchronization Schedules prepared showing the time of expected realization of current assets and the due dates of current liabilities, it appears that it will be more than sixty days before payments may be made on additional commitments by the XYZ Store. The financial manager of the XYZ Store can see at a glance that every possible effort must be exerted to increase the sales volume in order to close the gap between the expected realizations (based

on the past experience of the business) and the payments he has agreed to make. Furthermore, with realization on over half of the inventory extending beyond March First it would seem that there is on hand a considerable amount of slow-moving goods.

The Machine Parts Co., on the other hand, in spite of a lower current ratio, has its current assets and liabilities so synchronized that adequate realization regularly precedes the agreed liquidation dates of the liabilities. Thus, despite a poorer current ratio it appears that the Machine Parts Co. may incur some short-term debt with reasonable assurance of being able to make the payments on the due dates.

The result of another analysis is presented in Figure 3. This is the statement of a small restaurant chain and is an attempt to present a picture of debt-paying ability for a business which has a very rapid inventory turnover and which adds a large amount of service to the cost of goods appearing in the inventory. This makes it desirable to supplement the schedule with a footnote showing anticipated free income available for debt liquidation. The formal balance sheet shows what seems at first glance to be a most distressing current position, with a current ratio of approximately 1:2. But when the liabilities are segregated according to due dates and the realization dates of the current assets are considered a much more hopeful condition is indicated. And when the expected amount of free income available for liability liquidation is taken into consideration the financial affairs of the business assume a vastly different aspect.

Before taking up the detailed procedures for preparing these schedules three points must be emphasized: 1, that these schedules are considered as tools of insiders, e.g., controllers, treasurers, and managers, and whether such statements should ever

be made a part of a certified report is not considered in this paper; 2, that these schedules are not designed as a forecast—they are an analysis of asset and liability synchronization on the date of the balance sheet (in other words, a coördinated analysis of the time condition as well as the amount condition); 3, that this is merely a progress report, and the methods of presentation and the techniques used to procure the figures are still in a formative stage. Although the results of present tests are encouraging, it has not yet been possible to make a sufficient number of these tests to determine the useful limitations of the schedules or to be sure that the techniques cannot be materially improved.

The figures on these schedules have been developed from procedures based upon the following reasoning:

1. That current liabilities are definite facts at the moment of the balance sheet and, therefore, require classification only according to due dates.
2. That the realization of the assets is affected by both seasonal and cyclical factors.
3. That these factors should be taken into consideration on the basis of the actual past experience of the particular concern.

To accumulate the necessary experience data we have in most cases analyzed three separate three-month periods. These are:

1. The three months preceding the balance sheet date in the current year.
2. The corresponding three months in the preceding year.
3. The three months succeeding the balance sheet date in the preceding year.

Thus, if a balance sheet is to be presented on June 30, 1938, the periods to be considered may be illustrated as follows:

June 30, 1937					
Apr.	May	June	July	Aug.	Sept.
2.				3.	

June 30, 1938					
Apr.	May	June	July	Aug.	Sept.
1.				Period of expected realization	

If seasonal fluctuation were the only varying influence it would be reasonable to believe that realization would proceed during the three-month period following the date of the current balance sheet at the same rate it did during the corresponding period of the preceding year (3 above). Seasonal fluctuation, however, is not the only factor causing changes—the current year may vary widely from its predecessor. For this reason it has seemed necessary to compare the three-month period just preceding the balance sheet (1 above) with the corresponding period of the preceding year (2 above). Any trends indicating increasing or decreasing realization velocities of the various assets may, then, be taken into consideration.

Realization for the three-month period following the balance sheet is then based on the experience of the corresponding period of the previous year (3 above) after the figures for that period have been adjusted to reflect the changes between the preceding period of the former year (2 above) and the corresponding period of the current year (1 above). Thus, if sales had declined 15% and collections 10% during April, May, and June of 1938 in comparison with April, May, and June of 1937, realization for July, August, and September of 1938 would be anticipated by adjusting the actual rate for these three months in 1937 to reflect this change which has occurred in the preceding period.

Figures 4 to 8 inclusive show the summarizing procedures in one of the cases recently studied and represent the anal-

ysis of a June 30, 1938, balance sheet. These working papers were prepared to accumulate the figures appearing in the Expected-Realization Section of Figure 9, which was the first Synchronization Schedule prepared for the ABC Distributing Co. It should be borne in mind that where such statements are presented monthly a relatively small amount of work would be required at the end of each month, for all of the figures for the preceding months would have been accumulated and organized as a part of the regular routine.

As a first step in preparing the figures for the Synchronization Schedule the current liabilities outstanding on the date of the balance sheet were classified according to due dates on a less-than-30, 30-60, 60-90-, and over-90-day basis. It has not been considered necessary to include an illustrative work sheet for this simple process, but we may consider such a classification sheet as Working Paper No. 1.

The first and basic step in the analysis of the assets is a monthly aging of the accounts receivable as of the close of each month which must be considered. These aging sheets would be Working Paper No. 2. This Working Paper, because of its common use, is also omitted from the illustrative material. The work is done in the conventional manner and on ordinary work sheets, by classifying the accounts according to those that are less than 30 days, 30 to 60 days, 60 to 90 days, and 90 days and over.

As each monthly aging sheet is completed the columnar totals are transferred to Working Paper No. 3, Figure 4² in the following manner. The total of all receivables listed in the less-than-30-days column of each of these aging sheets represents the unpaid balance of sales of the current month. Each of these totals, then,

² This illustration covers only sufficient months for this particular case, in which the inventory was entirely turned over in less than 60 days.

A B C DISTRIBUTING CO.
WORKING PAPER "3"
COMPUTATION OF REALIZATION OF CREDIT SALES BY MONTHS
1937

	Column Total (Taken From Monthly Ag- ing Sheet)	Accounts Receivable Balances	Collections of Accounts Receivable Balances	Per Month	Aging	Over 90 Days	Over 90 Days	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Remaining Balance at 4/30 of April 1937 Credit Sales	5/31	0-30 \$44,638.00	30-60 17,635.00	60-90 5,762.00	over 90 2,194.00	Less Than 30 Days Amount	30 to 60 Days Amount	60 to 90 Days Amount	Over 90 Days Amount	Per Cent	Over 90 Days Amount	Per Cent	Over 90 Days Amount	Per Cent
Remaining Balance:	6/30	30-60 17,635.00	60-90 5,762.00	over 90 2,194.00		60.5	\$27,003.00		\$11,873.00	26.6	\$3,568.00	8.2	\$2,194.00	4.7
Remaining Balance at 5/31 of May 1937 Credit Sales	7/31	0-30 46,394.00	30-60 13,613.00	60-90 1,395.00	over 90 258.00	32,781.00	70.7	12,218.00	26.3	1,137.00	2.5	258.00	.5	
Remaining Balance at 6/30 of June 1937 Credit Sales	8/31	0-30 53,335.00	30-60 20,474.00	60-90 6,044.00	over 90 1,259.00	32,861.00	61.6	14,430.00	27.1	4,785.00	9.0	1,259.00	2.3	
Remaining Balance:	7/31	30-60 20,474.00	60-90 6,044.00	over 90 1,259.00										
Remaining Balance at 7/31 of July 1937 Credit Sales	8/31	0-30 48,823.00	30-60 17,051.00	60-90 11,039.00	over 90 2,432.00	31,772.00	65.1	6,012.00	12.3	8,607.00	17.6	2,432.00	5.0	
Remaining Balance:	9/30	30-60 17,051.00	60-90 11,039.00	over 90 2,432.00										
Remaining Balance at 8/31 of August 1937 Credit Sales	10/31	0-30 50,188.00	30-60 21,532.00	60-90 10,470.00	over 90 2,897.00	28,656.00	57.1	11,062.00	22.0	7,573.00	15.1	2,897.00	5.8	
Remaining Balance:	9/30	30-60 21,532.00	60-90 10,470.00	over 90 2,897.00										

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 4

A B C DISTRIBUTING CO.

WORKING PAPER "4"

COMPUTATION OF CASH SALES BY MONTHS

	Net Monthly Sales (From Sales Records)	Less Unpaid Balance Per Monthly Aging		Monthly Cash Sales		Per Cent Cost of Sales
		(From W.P. #3)	Per Cent	Amount	Per Cent	
1937:						
April.....	\$71,269.00	\$44,638.00	62.6	\$26,631.00	37.4	.9419
May.....	68,802.00	46,394.00	67.4	22,408.00	32.6	.9409
June.....	74,485.00	53,335.00	71.6	21,150.00	28.4	.9417
July.....	75,164.00	48,823.00	65.0	26,341.00	35.0	.9417
August.....	74,869.00	50,188.00	67.0	24,681.00	33.0	.9425
1938:						
April.....	\$54,986.00	\$36,988.00	67.3	\$17,998.00	32.7	.9425
May.....	62,225.00	44,800.00	72.0	17,425.00	28.0	.9413
June.....	62,160.00	42,476.00	68.3	19,684.00	31.7	.9400

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 5

represents the amount that should be realized in subsequent collections and is the upper figure in each monthly section of Figure 4. Thus, \$44,638, \$46,394, \$53,335, etc., represent the total of the less-than-30-day columns on succeeding monthly aging sheets. Each of the succeeding figures represents the totals of the columns indicated on the aging sheets of succeeding months. For instance, the June 30, 1937, Accounts-Receivable Aging Sheet had a total of \$53,335 in the 0-30-day column, \$13,613 in the 30-60-day column, and \$5,762 in the 60-90-day column. Thus Working Paper No. 3 is built up from the column totals of successive monthly Aging Sheets. After making adjustments for deductions resulting from returns, allowances, notes, etc., (omitted from the illustration) the differences between these monthly figures represent the cash realized from the sales made during the particular month for which the section is provided. After all of these cash figures are obtained the desired percentages may be calculated.

The monthly cash realized from sales and the percentages of cash sales and unpaid credits at the end of each month may then be determined as indicated in Working Paper No. 4, Figure 5. For the

purpose of this analysis Cash Sales comprise all sales made during a month for which cash is received within that month. At the extreme right of this Working Paper is a column showing the percentage of Cost of Goods Sold to Sales. These figures are taken from the monthly Profit-and-Loss Statements and are used in the following Working Paper.

On Working Paper No. 5, Figure 6, the sales figures listed on Working Paper No. 4 are adjusted to amounts showing the Cost of Goods Sold. The cost figures which apply to credit sales are then broken down on the basis of the percentages obtained on Working Paper No. 3, to show the months in which the cash covering these costs was actually realized. It may be observed from this statement that inventories have been considered as being realized in the following order:

1. Cash sales of the first month.
2. Credit sales of the first month.
3. Cash sales of the second month.
4. Credit sales of the second month.

and so on until the inventory balance has been absorbed. With this concern the second month's sales were always great enough to more than absorb the inventory. Therefore, the last figure in each monthly section is only sufficient to complete the

A B C DISTRIBUTING CO.
WORKING PAPER "5"
SUMMARY OF INVENTORY REALIZATION
1937

	Sales Schedule #4 (W.P. #4)	Cost of Sales Per Cent from Amount	Less Than 30 Days			Per Cent from Amount (W.P. #3)	30 to 60 Days Per Cent from Amount	Per Cent from Amount (W.P. #3)	60 to 90 Days Per Cent from Amount	Per Cent from Amount (W.P. #3)	Over 90 Days Per Cent from Amount
			May	June	July						
April 30:											
May Cash Sales.....	\$22,408.00	.9409	\$21,084.00			\$21,084.00	70.7	\$30,862.00	26.3	\$11,480.00	3.
May Credit Sales.....	46,394.00	.9409	43,652.00					19,917.00	61.6	4,061.00	38.4
June Cash Sales.....	21,150.00	.9417	19,917.00								2,532.00
June Credit Sales*.....	7,001.00	.9417	6,593.00								
Totals & Per Cent of realization.....	\$96,933.00		\$91,246.00	23.1%	\$21,084.00		55.7%	\$50,779.00	17.0%	\$15,541.00	4.1%
											\$ 3,942.00
May 31:											
June Cash Sales.....	\$21,150.00	.9417	\$19,917.00			\$19,917.00	61.6	\$30,939.00	27.1	\$13,611.00	11.3
June Credit Sales.....	53,335.00	.9417	50,226.00					19,544.00			\$ 5,676.00
July Cash Sales*.....	20,754.00	.9417	19,544.00								
Totals & Per Cent of realization.....	\$95,239.00		\$89,687.00	22.2%	\$19,917.00		56.3%	\$50,483.00	15.2%	\$13,611.00	6.3%
											\$ 5,676.00
June 30:											
July Cash Sales.....	\$26,341.00	.9417	\$24,805.00			\$24,805.00	65.1	\$29,931.00	12.3	\$ 5,655.00	22.6
July Credit Sales.....	48,823.00	.9417	45,977.00					18,676.00			\$10,391.00
August Cash Sales*.....	19,815.00	.9425	18,676.00								
Totals & Per Cent of realization.....	\$94,979.00		\$89,458.00	27.0%	\$24,805.00		54.3%	\$48,607.00	6.3%	\$ 5,655.00	11.7%
											\$10,391.00

* Only amount required to absorb inventory.

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 6

A B C DISTRIBUTING CO.
WORKING PAPER "6"

COMPUTATION OF REALIZATION OF ACCOUNTS RECEIVABLE

	Balance of June 30, 1937	Accounts Receivable	Realization Amount	Per Cent
Balance at June 30, 1937 (From control account).....	\$78,873.00			
Balance at July 31, 1937 (From control account).....	\$78,726.00			
Less: July Credit Sales (From W.P. "3").....	48,823.00	29,903.00	\$48,970.00	62.1
Balance at August 31, 1937 (From control account).....	74,165.00			
Less: July Credit Sales (From W.P. "3").....	\$17,051.00			
August Credit Sales (From W.P. "3").....	50,188.00	67,239.00	6,926.00	22,977.00
Balance at September 30, 1937 (From control account).....	78,620.00			
Less: July Credit Sales (From W.P. "3").....	11,039.00			
August Credit Sales (From W.P. "3").....	21,532.00			
September Credit Sales (From Sales Record).....	44,259.00	76,830.00	1,790.00	5,136.00
Balance to be Collected.....	1,790.00			
<i>Total</i>	<u>\$78,873.00</u>		<u>100.0</u>	

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 7

inventory realization for that section and does not represent the entire amount of that particular class of sales. Thus, \$7,001 is only the sufficient part of the June credit sales to absorb the remaining value of inventory carried on the April 30 balance sheet.

The procedures followed in Working Paper No. 6, Figure 7, are, I believe, quite obvious. The purpose of this Working Paper is to determine the percentage of collections on the June 30th receivables of the previous year. If required, adjustments to the realization figures thus obtained should be made for notes, returns, write-offs, etc., before the realization percentages are determined. In this case the variations between April, May, and June, of 1937, and the corresponding period of 1938 were so slight that no cyclical adjust-

ment was made and consequently no Working Papers have been included for these periods. But this important step should not be overlooked as at times collection conditions have wide variations.

Because of the credit policy of this concern, notes receivable are seldom charged back or renewed. For this reason it was necessary only to schedule the due dates of the notes, and this simple working paper has been omitted.

Working Paper No. 7, Figure 8, shows the adjustments which have been made because of a decrease in 1938 sales for April, May, and June from the corresponding months in 1937. This decrease has been applied ratably to both cash sales, that is those sales made and paid for within the month, and credit sales,

**A B C DISTRIBUTING CO.
WORKING PAPER "7"**

APPENDIX 1 ILLUSTRATION

* If collections had proved to be more difficult this year than last, say a 10% decrease, the monthly realization of credit sales to 60 days ($65.1 - 6.5 = \$8,670$) = $\$22,524.00$, and so on. The unabsorbed balance would increase the "over 90 day" amount.

Note: Actual figures have been coded to avoid possible identification. Figures used are to the nearest even dollar.

Figure 12a is the same as Figure 12, except that the data are taken from the research report of Richard B. Cole.

1 taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

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FIGURE 8

Cost of remaining Inventory used to fill Aug. Credit Sales....

A B C DISTRIBUTING CO. BALANCE SHEET, JUNE 30, 1938		
ASSETS		LIABILITIES
CURRENT ASSETS		CURRENT LIABILITIES
Cash.....	\$27,680.00	Bank Overdraft..... \$ 1,761.00
Accounts Receivable—		Accounts Payable—Trade.. 50,406.00
Trade.....	60,253.00	Accounts Payable—
Notes Receivable.....	8,029.00	Sundry..... 6,232.00
Inventories.....	93,746.00	Accrued Expense..... 3,846.00
Other Current Assets.....	8,907.00	\$ 67,245.00
FIXED ASSETS (Net)	15,651.00	
OTHER ASSETS	7,088.00	
	\$221,354.00	
		FIXED LIABILITIES
		NET WORTH.....
		none
		154,109.00
		\$221,354.00
SYNCHRONIZATION SCHEDULE		
ASSETS		LIABILITIES
EXPECTED REALIZATION		DUEDATES
<i>Within 30 Days</i>		<i>Within 30 Days</i>
Cash.....	\$27,680.00	Bank Overdraft..... \$ 1,761.00
Accounts Receivable—		Accounts Payable—
Trade.....	37,417.00	Trade..... 55,406.00
Notes Receivable.....	1,402.00	Accounts Payable—
Inventories.....	20,737.00	Sundry..... 6,232.00
	\$ 87,236.00	Accrued Expense..... 1,717.00
<i>30 to 60 Days</i>		\$ 65,116.00
Accounts Receivable—		
Trade.....	17,534.00	
Notes Receivable.....	4,405.00	
Inventories.....	44,469.00	
	66,408.00	
<i>60 to 90 Days</i>		<i>60 to 90 Days</i>
Accounts Receivable—		
Trade.....	3,916.00	
Notes Receivable.....	362.00	
Inventories.....	13,364.00	
	17,642.00	
<i>Over 90 Days</i>		<i>Over 90 Days</i>
Accounts Receivable—		Accrued Expenses.....
Trade.....	1,386.00	2,129.00
Notes Receivable.....	1,860.00	
Inventories.....	15,176.00	
Other Current Assets..	8,907.00	
	27,329.00	
	\$198,615.00	\$ 67,245.00

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research studies of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 9

those sales resulting in open account balances at the end of the month. As will be shown later there was a considerable variation between the expected 30-60-day figure, as determined on this Working Paper, and the actual realization. This was due to the prolonging of the realization period as the result of a large cash customer being permitted to make his purchases on open account, thus reducing the realization for the month of July.

This customer materially increased the amount which he purchased and paid his account in August, thus increasing the realization for that month. Such situations have no direct relationship to past experience and clearly illustrate that expected realization does not mean actual realization.

Just below the figures on this Working Paper is a note indicating how adjustments would be made when both sales and collections have varied.

A B C DISTRIBUTING CO.
VARIATION REPORT
EXPECTED REALIZATION
JAN. 30, 1938

	<i>Expected</i>	<i>Actual</i>	<i>Error in Items</i> <i>Amount</i>	<i>Per Cent of Error</i> <i>to Total</i>				
				<i>Per Cent Current Assets</i>	<i>Per Cent of Error</i> <i>to Total</i>			
EXPECTED REALIZATION:								
<i>Within 30 Days:</i>								
Cash	\$27,680.00	\$27,680.00	\$ 0.00	0.00	0.00			
Accounts Receivable	37,417.00	41,759.00	\$ 4,342.00	11.60	2.19			
Notes Receivable	1,402.00	1,402.00	\$ 0.00	0.00	0.00			
Inventories	20,737.00	16,540.00	-\$ 4,197.00	20.24	2.09			
<i>Totals</i>	\$87,236.00	\$87,381.00	\$ 145.00	.17	.07			
<i>From 30 to 60 Days:</i>								
Accounts Receivable	17,534.00	14,066.00	-\$ 3,468.00	19.78	1.75			
Notes Receivable	4,405.00	4,405.00	\$ 0.00	0.00	0.00			
Inventories	44,469.00	56,839.00	\$ 12,370.00	27.82	6.23			
<i>Totals</i>	\$66,408.00	\$75,310.00	\$ 8,902.00	13.40	4.48			
<i>From 60 to 90 Days:</i>								
Accounts Receivable	3,916.00	3,017.00	-\$ 899.00	22.96	.45			
Notes Receivable	362.00	362.00	\$ 0.00	0.00	0.00			
Inventories	13,364.00	12,640.00	-\$ 724.00	5.42	.36			
<i>Totals</i>	\$17,642.00	\$16,019.00	\$ 1,623.00	9.20	.82			

NOTE: Actual figures have been coded to avoid possible identification.

Figures used are to the nearest even dollar.

Taken from the research report of Richard R. Cole, B.S. in B.A., C.P.A.

FIGURE 10

The balance sheet and the schedule presented in Illustration No. 9 need little comment. They are made up in the same manner as those on the earlier pages and in contrast show a concern in a strong, healthy financial position.

The sources of these figures are:

Current Liabilities—Working Paper No. 1 (omitted in illustrative material)

Cash—(Balance sheet)

Accounts Receivable—Divided according to the percentages obtained on Working Paper No. 6.

Notes Receivable—Obtained by classification of due dates of notes receivable (omitted in illustrative material)

Inventories—Working Paper No. 7.

Other Current Assets—As none of these items was expected to contribute cash within 90 days they were not included in the analysis. When realization is

expected these items will be classified as have been the preceding assets. The final test of any procedure is whether it works. This test is presented in Figure 10. Even a casual glance will reveal that it does not work 100%. Although in some months there are compensating differences which tend to balance each other, in the last month the differences are cumulative and it is conceivable that the differences might under some circumstances be cumulative in all months.

A sufficient number of tests have not as yet been made to justify a statement as to what percentage of difference might be expected. In those cases where it has been possible to make a reasonably accurate verification there have always been compensating differences and the maximum net difference for the three months has been 4.85%.

This does not seem particularly discouraging, however, as the monthly determination of inventories on the basis of a gross profits test, the use of retail-inventory methods, standard costs, etc., always require a period of adjustment following their adoption. During this period the procedures of the process and the procedures within the organization are adjusted or refined so that the percentage of difference may be minimized. It has not seemed unreasonable to believe that a similar improvement may take place in this process as it is applied.

It is the opinion of the men who have performed the detail research on the various cases that, once the background of the previous year's data is established, the preparation of the monthly schedule should easily be accomplished in a few hours since only the current month's figures need be added to the working papers before the schedule is prepared.

It has also seemed that the use of, or cost of, these hours may be justified by

the value of the current information which is presented in a consolidated and co-ordinated form in the Synchronization Schedule. This schedule gives point to the monthly analysis of receivables, which today is so frequently omitted, and presents a picture of debt-paying ability which may be compared both in importance and position to the gasoline gauge on an airplane or the water gauge on a steam boiler, both of which are refinements from more cumbersome and less adequate methods of obtaining the vitally essential information which they reveal.

It is hoped that this Synchronization Schedule, presented monthly, may give a more sensitive and vivid picture to those charged with the responsibility of financial administration, and that it will contribute to a clearer current knowledge of the widening or narrowing margin between financial health and the inability to pay debts when due. As a result of such information at least a few may be saved from the great annual mortality list.

ACCOUNTANCY: A PROFESSION FOR EDUCATED MEN

H. M. TURNBURKE

I BELIEVE that my subject is more the statement of an axiom than the designation of a topic of discussion. In fact, I believe that the name of any other bona fide profession could be substituted for "accountancy" without lessening its axiomatic qualities, if my understanding of the term "profession" be correct. Still, it is not unusual for a statement of basic truth to require discussion and enlargement upon it before it is accepted as such. In support of this observation I cite the undeniable fact that, regardless of its self-evident truth, my subject is not unanimously subscribed to today even by the members of the accountancy profession,

and certainly it is not admitted or understood by a far greater proportion of the lay public. So it may be that some benefit will result from a discussion of the topic, if only to afford a basis for a reaffirmation and re-inspiration of the faith to which I subscribe.

In ordering my thoughts on this topic, I have freely consulted the recorded views of many eminent members of the accountancy profession over the past decade. Some of these observations of others I have quoted directly in this paper. In fact, upon surveying the finished product, I fear that I am like the struggling author whose story the publisher rejected, although con-

ceding it to be both good and original. But the publisher explained that the part that was good was not original and the part that was original was not good.

As in the case of the development of any subject, I believe we should first examine it to see if there be necessity for a definition of terms. Happily, there is no need today to define or qualify the term "profession" as applied to accountancy, although not so long ago the forthright and unequivocal designation of accountancy as a profession might have required some persuasive explanation in any spheres beyond that of the profession itself. Thus rapidly has this young profession attained its full stature and maturity in the assemblage of all of the professions of our economic and social order.

Another term of my subject, however, assuredly calls for a definition. It has meant many things to many men, and even the sages down through the centuries of time have never been in complete agreement as to its true meaning. In the face of these facts, I cannot but feel somewhat presumptuous in attempting to designate an acceptable definition. That term is "education" and its various derivatives, including the one in my subject. "Education" has been given definitions serious and definitions facetious, definitions too narrow and definitions too broad, definitions too nebulous and others too precise. But regardless of this welter of opinions, each man for himself is quite apt to formulate a definition which to him stands out with crystal clearness and soul-satisfying completeness. For myself, I like to think of education simply as the development of one's intellectual, moral, and cultural faculties. Upon the basis of my own conception of education then, my subject becomes the statement that accountancy is a profession for men of developed intellectual, moral and cultural faculties. With this somewhat more specific version

of the topic, let us proceed to explore it.

The thought that members of the accountancy profession should have well-developed intellectual, moral and cultural faculties is a relatively new idea in the history of the profession. It is a further unfurling of the scroll, the opening of a new vista, the reaching up and spreading out of higher standards and ideals, all of which things have been occurring steadily but unobtrusively during the past half-century. Let us briefly look backward and downward along the path which the profession has traveled, with an eye particularly to the development of the educational requirements.

The accountancy profession as such undoubtedly had its beginning in England, probably at some time during the seventeenth century. It seems quite probable that the early public auditors, or public accountants, of England worked single-handed, but in the course of the increased recognition and prestige which these men obtained from the field of business it became necessary for the principal to secure the services of assistants. The record indicates that while at this time there was a smattering of accounting literature, the science of accounting was not taught at any educational institution. This being so, and also because of the deeply rooted custom in the English economic and social order of apprenticeship-training in the arts and crafts, it was perfectly natural that English public accountants should adopt the apprenticeship method of acquiring and training their staff members. Indeed, that method largely prevails in the profession in England to this day. The first chair of accountancy in the British Isles was not founded until 1925 (in the University of Glasgow).

When the accountancy profession had its beginnings in the United States by direct extension from England, it was but natural that the English custom of apprenticeship-

training should have been taken up along with other policies and procedures. The extension of the apprenticeship idea down through the years of the profession in this country partly accounts for the fact, I believe, that the profession as a whole has been tardy in calling for a formal education along technical and cultural lines equivalent to that required by the older professions.

The idea of the desirability of a technical education for those entering the accountancy profession gradually took form after the year 1900, although it was not until the period of the World War that such educational facilities became generally available. During the war period, tremendous influences came into play which acted as powerful stimulants to the business public's interest in the science of accounting. Income and war-profits taxes jumped to rates as high as eighty per cent of net income. Business in all lines mushroomed to a volume previously undreamed of, and the financial operations of the Government itself increased to gigantic proportions. The demand of business and government for trained accountants was far beyond the supply of such men. This situation naturally stimulated the launching of many new schools of accounting, both resident and extension, and brought new life to those already in existence. Here the demand was for an intensive technical training so that the student could be equipped in the shortest possible time to enter this new and lucrative field of endeavor. The idea of the desirability of education in collateral subjects was but imperfectly realized, and in most instances was confined to a more or less comprehensive study of business law. The idea of the so-called cultural educational requirement was practically nonexistent.

From the post-war period down to the current decade, there was a gradual development of sentiment for a broader and

better-balanced education for those who would enter the profession, although until the last few years the subject was dealt with in much the same manner as Mark Twain's reference to the weather. Be it said to the credit of the profession's future, however, the demand for higher educational qualifications of those who would enter the profession is now in the ascendancy. Perhaps it may be said that the rounding out of the first half-century of the profession in this country marked the close of the apprenticeship or limited-formal-education era, and ushered in a new consciousness of the necessity for raising the educational standards of the profession to a point comparable with that of law or medicine.

Looking about us where we now stand we see evidence on all sides of the increasing demands for higher educational standards by those comprising the profession, the adoption of higher standards by our institutions of higher learning, and complicity with those standards by those who would enter the profession. The requirement of a college degree as a prerequisite for the C.P.A. certificate became effective in New York on January 1, 1938. The University of Illinois recently established the Ph. D. degree in accounting, and Columbia University now has the first graduate school of accountancy. The records of the American Institute of Accountants show that there has been a marked increase in the percentage of new members who possess college degrees. The record is indeed giving evidence that accountancy education is coming into its own. The problem now remaining to be solved is the formulation of standards which can be agreed upon by our educational institutions as constituting an adequate accountancy education. Undoubtedly, in the fullness of time, this will come.

In order to determine a standard of educational requirements for the account-

ancy profession, obviously it is necessary to consider carefully the demands which may reasonably be made on the public accountant of today, his obligations and responsibilities, and the present-day scope of his field of activities. As the training and educational requirements of the profession have advanced apace, so has its scope of useful service to the vast field of business, both private and governmental. Or is it the other way around? Sometimes I feel that the public accountant's proper field of usefulness has increased more rapidly than his professional education needed to serve such an extended field.

The public accountant of today, if he wishes to engage in a general practice as distinguished from one confined to specialized lines, must have a reasonably adequate knowledge of the science of accounting as it applies to the following types of professional engagements: auditing, the installation or revision of systems of accounts, special investigations, municipal or other governmental auditing and system installation, engagements pertaining to the financial affairs of trusts, receiverships, bankrupt and decedents' estates, and audit and system installation engagements involving cost accounting. Now this is not to say that he must have at his mental fingers' tips a complete store of knowledge of each of these subjects. But he should have at his physical fingers' tips, as the result of prior study and research, a reference library in which is contained the best accounting literature on these and other subjects. He must be prepared to act as adviser to his clients in matters of interpretation of trends in their business enterprises as indicated by the financial facts, in formulating short or long-term programs of financing, in separating a business into its component parts in order to locate the weak spot, in suggesting the most suitable form of busi-

ness entity for the individual enterprise, and a host of other subjects requiring opinions on financial matters which the public accountant is peculiarly fitted to render. He must be well-versed in business law, for this subject is inextricably bound up with the science of accounting. His knowledge in this field will enable him to recognize the legal significance of financial transactions, and where appropriate he will work with his client's attorneys. He must have a thorough familiarity with the Federal tax laws in all of their ramifications, and should be equally familiar with the tax laws of the state or states in which he conducts his practice. On the personal side, he must be able to express his thoughts clearly, logically, and grammatically, both orally and in writing, for not only is the result of his work usually reduced to writing, but he must be prepared to go before boards of directors, various governing bodies of municipalities and other governmental agencies, and even open-forum meetings to express his ideas and make his recommendations on accounting subjects. Last, but by no means the least of his personal qualifications, if he is to be a truly representative member of a profession as that term is used in its best traditional sense, he must be well-read and well-informed on community, state, national, and world affairs of today, and must be poised and at ease in any surroundings in which he finds himself. In short, he must be a cultured man.

With this array of qualifications, undoubtedly incomplete, which can reasonably be expected of the modern public accountant, let us consider the form and program of education which will furnish these qualifications. I believe that a man's education for the accountancy profession may be divided into three divisions which I may describe as direct technical, collateral technical, and cultural.

By direct technical education I mean

a thorough knowledge of the science of accounting in all of its phases, a statement the brevity of which is indeed out of all proportion to the agony of soul which will accompany its acquisition. It is highly essential that this technical education be guided by the best and most up-to-date literature of the profession. While the profession is already rich in literature, the end has by no means been reached. There is still no ultimate and unchangeable set of principles for the profession which can be pointed to with the statement "This is final, the last word. It will govern our course today, tomorrow, and for all time to come." This is as it should be in respect to a profession based upon an inexact science. To illustrate: in the field of municipal accounting great advances have been made within the past decade, and some of the richest contributions to the literature of this particular phase of the science are but a few years old. And so I say that care must be exercised to see that the student is supplied with text material and references which represent the best of present-day concepts. I am impressed by the favorable reports made by those institutions of higher learning which have experimented with the so-called laboratory feature in connection with their accounting courses, and it seems to me that a judicious amount of practical contact with the actual conditions of public practice should be helpful to advanced students.

By collateral technical education I mean a thorough grounding in business law, business English, Federal and state tax laws, and the general field of economics. The last-named subject is vitally important in this day and age, when a veritable new testament is being written of a new and strange national economy without parallel in the history of this country.

The desirability of the first educational division which I have designated is too obvious to require any elaboration. The

desirability of the second will probably be conceded without serious dissension. But I fear that my third division, being the newest of the three, may not be accorded as wide an endorsement as its two predecessors. For this reason, it is but natural that I am inclined to dwell upon this branch of accounting education to a greater extent than the other two.

I have named my conception of the three divisions of accountancy education in the inverse order in which I believe they should be acquired. I like to think of the complete educational structure as a pyramid of three strata, the bottom and broadest one being the cultural one, the next stratum being the collateral technical one, and the top stratum being the direct technical division. There is thus established a gradual focusing upon the objective, a progressive concentration upon a focal point.

Let us not forget that this pyramidal educational structure we are viewing is designed for a profession. The world regards a professional man as being essentially an educated man, not only along the lines of the particular field of personal service in which he has specialized, but in the general realm of cultural education and background. Surely, therefore, it is eminently fitting that the foundation of education for the accountancy profession should be along cultural lines.

This cultural foundation should by all means cover English composition and literature, political science, history, and at least basic courses in philosophy and one of the sciences. The study of a foreign language would also be desirable. All of these studies are broadening, quite apart from the point that they add to the student's total fund of knowledge.

In voicing my observations on the desirability of cultural studies, I wish to make it plain that I am not of that old school of scholastic Spartans which be-

lieves that the expenditure of rigorous mental effort in mastering any scholastic subject is good for one's cultural soul. I do not believe that the study of Latin or Greek is beneficial *per se* in acquiring a modern-day cultural education. I believe it is much more important to one's cultural development today that he have an intelligent understanding of present-day developments and trends in national and international affairs, political economy, sociology, psychology and kindred subjects having to do with social relations and behavior of mankind.

I mentioned English composition and literature as the first subject of my cultural division. I did this advisedly, for I believe without question that the ability to express one's thoughts clearly, logically, and concisely, orally or in writing, in short, a proficiency in rhetoric, is of incalculable value to the public accountant. In most instances, the summing up of his work of weeks or months is in the form of a written report. To the client, this is indeed the "proof of the pudding." On the form, arrangement, and wording of his report will he largely be praised or damned. Aside from the question of grammatical correctness of comments in a report, there is the ever-present danger that through ill-advised selection of words there is ambiguity at best and false impression at worst. The ability to say what you mean, and nothing else, and to mean what you say, and nothing else, is not easy, but it may be acquired through a proper study of English.

It is entirely appropriate that this period of cultural education should come first, because while it is being acquired the individual has ample opportunity to discover whether or not he has those inherent qualities which are necessary to one's success in the profession of accountancy, and to cultivate and nurture from the start those habits of mind which are typical

of the best professional attitude. Let me mention the principal personal qualifications which I believe the individual should possess if accountancy is his proper sphere.

There must be deeply ingrained in him an appreciation of accuracy and orderliness. Not the hairsplitting accuracy of the bore who feeds his egotism on constant contradiction of others, or the accuracy of one mentally myopic and content to dwell upon such petty inaccuracies as fall within his very limited vision, but rather that broad sense of accuracy in all things that is supported by shining truth and cold facts. One who has not a lively appreciation of orderliness for its own sake should seek another field without further ado, for his easy toleration of chaos would spell his doom in a profession where exceedingly high standards of orderliness in all things prevail.

He must have an inborn and innate sense of honesty that is fused to his very soul. He must possess not only moral honesty but intellectual honesty as well. I know men who have the former but not the latter. Fortunately for themselves and the profession, they are not public accountants. Intellectual dishonesty is harder to detect and overcome, because it is in a more insidious form and is covered by the cloak of wishful thinking, prejudice, and face-saving. A man is of commendable moral stature who is morally truthful, but he who can face unpleasant but inexorable facts unblinkingly and unafraid has indeed attained man's estate in honesty. As to moral honesty, I know of no profession which makes as exacting demands upon its members in respect to this trait as the accountancy profession. It is the very essence of value of the services which he offers the public. Though a man's technical training and ability be of the highest, if there be as much as the suspicion of a doubt of his absolute honesty, as a public accountant he is a condemned man.

He must have or must develop an analytical and logical mind. A capacity for unerring analysis is of tremendous importance to the public accountant. He must have the ability to thread his way through a maze of disordered facts and chaotic information, brushing aside that which is irrelevant, rearranging those fragments that are pertinent, and finally developing a true and clear picture of the situation as a whole.

He must be possessed of imagination, not of course of the pipe-dreaming or amiable-liar type, but that active and responsive variety that sends the mind exploring ahead of the facts, and accurately pictures conditions unseen at the moment, an accurate sketching in of the blank spots in the picture, the functioning of a sort of sixth sense that recognizes the correct conclusion to which the known facts point.

And now at the risk of seeming to give tongue to an heretical utterance, I say that he who would become successful as a public accountant must have no more than a reasonable and rational facility in mathematics. That is to say, this particular personal qualification should be kept in its proper perspective in the complete picture of all qualifications.

No matter how fascinating the sport of making figures jump through the hoops of mathematical formulae or in marshaling them in endless battalions and regiments, they should be handled with restraint and with a nice discrimination between the important and the unimportant in dealing with the client or the general public.

And finally, I must mention one more attribute which is a veritable gift of the gods for one who is engaged in any profession. In fact without it, or with a negative variety of it, one labors under a well-nigh insurmountable handicap. Strangely enough, this attribute seems to be less apparent in the profession of accountancy

than in some others. I refer to an engaging personality. The personal qualities which the term designates are made up of so many different factors, and the complete thing itself is something so very intangible that it is difficult to describe. And yet the possession or lack of it is one of the most obvious facts about a person. It is of particular value to the professional man because he is dealing in that great intangible known as personal service. He cannot lay his wares on the counter for the buyer's inspection. His code of ethics does not permit him to assure the prospective seeker of his services that he is beyond all doubt an expert in his specialized field, and that the prospective client would be wise to engage him. So that subtle thing called personality comes into play. As applied to the profession of accountancy I believe it is poise, a quiet impression of self-confidence, a certain air of restraint, of reticence that shows the ability to respect confidences, a well-developed sense of tact, and an equable disposition bordering somewhat on the sunny side. Personality, alas, seems to be something that is determined for us at the same time as the color of our eyes.

A great opportunity and a great responsibility lie ahead for the young men of today who are preparing to enter the profession of accountancy. There has never been a time when the potential field of service of the profession was as broad as it is today. This has not come about by any "muscling in," to use the vernacular of the day, by the accountants in fields that are foreign to their talents. It is rather a case of the new and broader fields having beckoned to accountants. In the field of Federal taxation and regulation of business alone there are opportunities for service now and in the future which cannot be measured. The income tax in all its phases, the capital-stock tax, the social-security tax, the estate tax, the gift tax, the re-

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quirements of the Federal Securities and Exchange Commission and of the newly-enacted Wage and Hour Law, are all potential sources of demands upon the public accountant for his advice and counsel in matters in which he is peculiarly fitted to advise.

On October 25, 1938, the front page of the *New York Times* carried the news that the Controller of the City of New York had approved the adoption of a new honor system of collection of the city's emergency tax similar to the established British procedure in respect to their income tax. Under this system the City of New York will accept as statements of fact all figures on emergency tax returns that have been certified by a certified public accountant, thus saving a large part of the \$2,000,000 spent annually by the city in conducting its own audit of these returns and settling disputes with taxpayers arising therefrom. Such a plan of course includes stern disciplinary measures against any certified public accountant discovered misrepresenting the facts of a return, but I somehow feel that there is going to be little if any need to invoke the disciplinary measures. Who can predict how far this novel policy will extend in governmental agency fields, and the amount of added prestige which will accrue to the accountancy profession as the result thereof?

In governmental accounting, and particularly municipal accounting, there is a field that is still largely undeveloped. However, there is a rapidly growing realization that governmental agencies of all kinds and sizes should be subjected to periodical audits by independent public accountants, and that such a policy is best suited to stamp out the evils of inefficiency or fraud which all too often are found in the affairs of governmental units.

Through the media of the many ethical activities of the great national body of the profession, the American Institute of

Accountants, and the various state organizations of the profession, there is a constantly growing acceptance and appreciation of the public accountant's value in the business world. More and more he is being sought in an advisory capacity quite aside from the more routine demands made upon him for audit engagements, the installation of systems of accounts, and special investigations.

Lest I seem to be describing a Utopia that lies just beyond the brow of the next hill, I hasten to remind you that the professions as a class are not as bountiful in financial reward as the field of business, and that while the material emoluments of the accountancy profession are at least on a par with those of other professions, accountancy is by no means a royal road to riches. For the man of average native ability, however, plus a sound education acquired with a view to entering the profession, there awaits a fairly adequate financial income and a sense of satisfaction from the performance of highly specialized personal services that cannot be evaluated precisely in terms of money.

I have stated that a responsibility as well as an opportunity awaits the newcomer to the profession. We who are now actively engaged in the practice of our profession have traveled a path which thus far as not always been easy. We have struggled to raise the standard of professional fitness within the profession; we have labored unceasingly in the cause of educating the business public to an understanding of the nature of our services and the benefits that may be derived therefrom. We have banded ourselves together in community, state, and national organizations to bring these things about more effectively. We have written and are attempting to live by a code of ethics of a high order. These gains that we have made are precious possessions to us and to our profession. The responsibility of the young

men entering the profession is to guard well the ground thus far won, and to assist us further in elevating our standards and the order of our professional services to the business public. Twenty-five years will be spanned and then the destiny of

the profession will be in the hands, and may I hope the hearts, of those who are now the newcomers. In the realization of this it is indeed inspiring to note the forward movement on all fronts to raise the educational standard to higher levels.

ACCOUNTING EDUCATION, ETHICS AND TRAINING

WILLARD J. GRAHAM

IN ORDER to bring this discussion into manageable proportions it has been necessary to limit it to a consideration of only a few of the major issues involved. Furthermore, this paper is concerned only with the education of qualified accountants, public and private, rather than the technical training of bookkeepers, clerks, and other routine workers. The training of these routine workers is an important problem, but one entirely separate from that of the broad education of an accountant.

It is not necessary here to describe the development of accounting to its present position among the professions, nor to describe the corresponding progress which has been made in the education and training of accountants. More can be gained by focusing attention toward a few issues on which there is not yet complete agreement among the members of the profession, their clients and their employers.

First: Should the accountant be college trained?

New York State has answered this question in the affirmative with respect to public accountants; after January 1, 1938, all applicants for admission to the examination for the certificate of Certified Public Accountant in that state must have completed the course of study in a recognized college or school of accountancy. It is probable that other states will follow the example of this progressive state, as

they have so often done in the past. The leading accounting firms have given a similar answer to this question by giving distinct preference to college-trained men when adding permanent junior accountants to their staffs. Even employers of private accountants select college graduates when they are seeking men whom they can develop into responsible accounting executives. In general, then, it is apparent that it is the prevailing opinion (with some outstanding exceptions, to be sure) that the training of qualified accountants, both public and private, should include a background of college education,

"A college education," however, means "all things to all men." General agreement might be secured on the proposition that an accountant should have a "college education" but wide differences of opinion might arise with regard to conceptions of what that college education should be.

Probably the widest variation would occur with respect to the relative emphasis that should be placed on cultural education, broad business training and technical accounting training.

In the words of one of our leading public accountants:¹

"Ideally the scope of accountancy education embraces all subjects and matters relating directly or indirectly to the production, acquisition, conservation or trans-

¹ Norman E. Webster, "Bulletin of the New York State Society of Public Accountants," April 1934, p. 9.

fer of valuable property or services by individuals or associations of individuals. Therefore it includes the known facts as to all forms of transactions, as to all classes of value, in all kinds of business, and in addition, it embraces the relation to accountancy of the material sciences, law, economics, finance, ethics, and logic."

Without pausing to analyze or to appraise this admirable statement of the ideal scope of accountancy education I shall present and attempt to support certain propositions which express my own conclusions on this subject.

1. Two years of regular college work in so-called cultural subjects should precede specialized training in business and accounting subjects. The objectives of this cultural background are at least three-fold: first, a degree of understanding of the world in which we live, some appreciation of literature and the arts, a speaking acquaintance with philosophy, history, mathematics, psychology, and languages, the sciences and kindred subjects constitute minimum preparation for the fullest enjoyment of "living"; furthermore, a broad general education facilitates association on equal terms with men of similar educational backgrounds, whom the qualified accountant meets constantly in his profession and in his private life; finally, the accountant must learn to analyze complex situations and to think through problems to logical conclusions. None will dispute, I think, that many of the foregoing subjects are admirably designed to develop the faculty of clear thinking.

It may be noted here that many public-accounting firms give preference to graduates from a four-year *cultural* course over graduates from business and accounting courses which are deficient in cultural training.

2. The business training following this cultural background must cover the broad field of economics and business, including

business organization and management, and an analysis of the problems of production, marketing and finance. The latter, of course, are the productive activities of business; accounting is strictly a service designed to supply information for the operation and control of the productive activities. It is futile to train a person to collect, analyze and present in report form information for the control of business operations without first acquainting him with the nature and significance of these operations. The sterility of so many accounting reports can be traced, I believe, to a lack of appreciation of the real nature of business, resulting in the inability to report intelligently about it.

3. The accounting courses proper should emphasize fundamental principles and theory, and managerial uses of accounting information, rather than bookkeeping procedure, routines and technique. I do not mean that training in technique should be omitted; pure theory with no practice is valuable only as mental discipline, and its use value is no greater, perhaps, than practice without theory. But it is possible for a student to "go through the motions" of bookkeeping practice with no understanding of what he is about or of what use the results of his labors may be in the management and control of business operations. I am insisting only that proper emphasis be given to the analysis of the *reasons* for these procedures, so that graduates from these specialized accounting courses may be well-rounded, analytically-minded business accountants rather than highly skilled technical bookkeepers and problem solvers. And besides, in my opinion, the most detailed of this technical training should be secured *after* graduation in the office of the employer.

4. Five years of college training, probably leading to a Master's degree, is a minimum time allowance for adequate coverage of this suggested program. It is

impossible, in four years, to get the necessary cultural background, the over-view of business organization, management and control, and the required specialized training in accounting. Several of the better collegiate schools of business have recognized this fact and are operating on a five-year program, following in the direction of precedent long ago established by the other professions—law and medicine—which require as many as six or seven years for their required collegiate training.

5. In this five-year program there must be almost constant training in English, both oral and written. Nothing is more pathetic than the inability of an otherwise competent and intelligent person to express himself clearly and forcibly, orally or in writing. Throughout his whole college course the prospective accountant should study English composition and, perhaps, public speaking. He should write, and frequently present orally, reports on all kinds of subjects. In my opinion, it is almost impossible to spend too much time on English.

6. A policy of careful selection and elimination must be rigidly enforced throughout the whole of this five-year program, and students who are not fitted by capacity, temperament or character for entrance to the accounting profession must be directed to other professions or vocations for which their abilities are better adapted. Such a plan of vocational guidance is invaluable to the student, for he thereby avoids wasting time and money preparing for a profession for which he is not suited and in which his chances for success are therefore limited. Furthermore, the accounting profession itself is relieved of one more incompetent or unethical practitioner.

The foregoing, in my opinion, are fundamental essentials of any program designed to produce properly trained business accountants. It is now in order to inquire

as to the extent to which collegiate schools of business have met these minimum requirements in their programs of accounting training.

The first deficiency is obvious: adequate training in English is lacking, for college graduates are notoriously deficient in this respect. The root of the evil probably lies in the grade school and deficiencies originating there are further aggravated in high school and in college. In the endeavor to broaden education and include so much, the one basic fundamental of all knowledge—the proper use of the mother tongue—is crowded out. It is particularly unfortunate that, in recent years, so many schools of business have eliminated from their requirements for a Master's degree the writing of a satisfactory thesis and the passing of an oral examination before a committee.

Training in accounting technique is probably more than sufficient in most schools of business—but often at the expense of more important training. Many schools emphasize technique at the expense of cultural background, basic business training, and analysis of the use of accounting information. Many so-called accounting courses are still too much like the business-college bookkeeping courses from which they originated. Apparently it is difficult to realize that underlying accounting processes are fairly simple when there is an understanding of the purposes for which the results are to be utilized.

A third deficiency in our training arises at least partly from those already mentioned: students are not trained to think! It is difficult to discover precisely where the fault lies, although it is probably true that too large a proportion of our young people go to college and that many of them are not capable of learning to think; certainly our methods of selection and elimination are imperfect. Perhaps students are

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taught too much—spoon-fed, as it were—and learn too little on their own initiative; perhaps there is an over-emphasis on the acquisition of factual knowledge rather than "mind-stretching" exercises. But whatever the cause, the fact remains that many college trained accountants have little capacity for thinking through complex situations and formulating judgments.

It would be misleading to give the impression that present collegiate training in accountancy is all bad. On the contrary, most of it is very good. The accounting teaching profession deserves much praise for the strides it has been making. Undoubtedly, there have been distinct improvements in research and training as accounting has advanced toward the leadership of the professions. Practicing accountants and academicians have cooperated to determine what type of training is preferable and to develop the curricula of schools of business to supply such training. Time-consuming bookkeeping courses have been replaced by courses in accounting principles at a higher educational level. So-called practical courses have been made really practical through the cooperation of practicing accountants or by adding to the instructional staff men with practical accounting experience to supplement their academic training.

More attention is now given to business courses other than accounting. Economics, business organization and management, finance, marketing, production, and others are now recognized as an essential part of collegiate training in accounting. A similar trend, though not so marked, toward inclusion of more cultural courses is, in my opinion, very encouraging. In too few instances, however, is there a recognition that true professional training in accountancy, including an appropriate cultural background, requires more than four years. But it is encouraging that the

leaders of the profession talk about it. It is probably true that competition for students (and for their tuition) is the primary restraining factor; otherwise, most of the recognized schools of business would admit only students with two years of regular college work taken in departments outside the school of business, and would then require three years of training in business leading to a Master's degree.

Perhaps the greatest improvement in collegiate training for accounting has been achieved through better selection of the instructional staff. There is now general recognition of three important qualifications of a good accounting instructor.

(1) He *should* have a broad cultural training and he *must* have a broad general background in business administration.

(2) He must have had a thorough training in accounting, including some practical accounting experience, preferably as a public accountant.

(3) He must, of course, be an experienced teacher—and a good one.

Two deficiencies of earlier training have been eliminated where these principles have been recognized and applied. First, accounting graduates, with Master's degrees or even with Doctor's degrees, are now encouraged to engage in accounting practice before entering the teaching profession. And second, practicing accountants, whose part-time teaching was formerly the bone and sinew of many instructional programs, are now used only for certain highly specialized courses, such as income taxation. A few outstanding exceptions only go to prove the general rule that high-grade outstanding practitioners, teaching on a part-time basis, are usually very poor instructors.

Up to this point I have not referred directly to accounting ethics—presumably an important phase of this discussion. But in a very real sense ethics has formed the central subject of discussion, for a knowl-

edge of what constitutes unethical accounting practices is very largely a matter of thorough education and training in accounting and related business subjects. In general, the code of professional ethics may be summarized as requiring that the accountant deal with his client, his fellow accountant, and with the public in a spirit of fairness and honesty, and in a manner in keeping with the dignity of his profession.

For a more definite statement of the ethics of accountancy, reference may be made to the rules of professional conduct of the American Institute of Accountants. Many of these rules concern relations with fellow public accountants; they forbid advertising, solicitation of competitors' clients, hiring of competitors' employees, competitive bidding, and similar methods of "unfair" competition. Other rules pertain strictly to relations with the client; they require that the accountant hold confidential all information secured from a client's records, that he must not accept other engagements which might conflict with the interests of the client, that he must not pay or receive commissions in connection with work done or business secured, that he shall not render services upon a contingent fee basis, and other similar restrictions. A third group of rules deals with matters that concern both the client and the public; an accountant shall not engage in any business incompatible with the practice of accounting; he must not be associated with an educational institution whose code of ethics is not acceptable; he must not certify to a statement of estimates of earnings contingent upon future transactions, and—above all else—he must not prepare a financial statement containing an essential misstatement of fact or an omission of fact.

It is not possible here to discuss all of these rules of professional conduct. Intentional violations are rare. In this connection, it is interesting to note that the

council of the Institute, in its fiscal year just ended, considered only twenty-one complaints of alleged violation of its rules; only four of these resulted in the filing of formal charges and hearings before the council sitting as a trial board; the results were: one verdict of not guilty, one admonishment, one suspension, and only one expulsion. Many an alleged breach of ethics consists of the misstatement or the omission of facts not considered by some accountant to be essential—because his narrow technical accounting training has not developed for him the relationship of accounting facts to investment values and managerial control. In my opinion, the best way to promote ethical accounting practices is by the broad and thorough training of accountants along the lines already suggested.

Throughout this discussion the emphasis has been on broad general business and accounting training rather than narrow specialized technique. There is not time in a college course for everything, and the *details* of specialized technical training can be secured after graduation, on the job and along the specific lines called for in the situation in which the young graduate finds himself. It is admitted that, with complete technical training, he would be a better clerk or a better junior accountant *immediately*. But, if he has a broad general background he will make much more rapid progress and will eventually develop into a better accountant. He can put the finishing touches to his specialized technical training when he knows just what his job is going to be; but the cultural background, the training in business organization and management, the ability to analyze complex situations, the capacity to "think clearly without confusion" must be developed in his college courses; otherwise, it can be secured, if at all, only at tremendous cost in effort, mistakes, and bitter experience.

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CONTENT OF THE AUDITING COURSE

PAUL E. BACAS

FOR THE purposes of this paper auditing will be considered as the application of accounting principles to the various transactions which come before the public accountant in his daily work. It is essential that instruction in auditing include not only the application of the principles to a certain transaction but the application of the principles to the same type of transaction under varying conditions and circumstances.

The course in auditing is probably the first subject and in many instances the only subject in which the student obtains knowledge which should develop the outlook of the professional accountant. It is the duty of the instructor in this course to endeavor to transmit some of the tendencies and habits of the public accountant.

As an advanced subject auditing is restricted to those students who have satisfactorily completed courses in other accounting subjects such as bookkeeping, theory of accounting and accounting problems. It should not include detailed discussions of principles of accounting, or give any basic instruction in such principles. There have been numerous complaints from students and in some instances from teachers that courses in auditing contained too much which the students had already covered in other courses. On occasion it may be necessary to discuss accounting principles but such discussion should be limited to clarifying their application to situations which a public accountant faces.

Is it advisable to endeavor to give the student instruction which may equip him to undertake not only the work of the junior accountant and the routine of the senior accountant on ordinary engagements but also to deal with problems which may arise on large or unusual en-

gagements? It appears that instructors would perform a commendable service to the profession of public accounting if their work with the students in a course in auditing served to develop good junior accountants who have a working knowledge of the duties of the senior accountants. A large part of the training of the senior accountant can come only from years of experience on engagements and contacts with the principals of the public-accounting organization, the clients, and the employees of the client. There has not as yet been developed any form of instruction which can replace such training and it is doubtful if it will ever be developed. Does it not seem advisable, therefore, that instruction in a course in auditing should be limited to those things which will serve to develop capable junior accountants with a knowledge of the requirements of the profession of public accounting?

Many students who complete courses in auditing lack some of the qualifications which might make them successful public accountants. It is usually such students who complain about the instruction in the routine of the work of the public accountant and endeavor to obtain instruction in very advanced auditing procedure. But the auditing instructor knows that those who are fitted for the profession will be developed along practical lines and that others will obtain some training which will assist them in other endeavors.

The course in auditing as distinguished from other courses in accounting and many other subjects should emphasize continually the habit of clear thinking. An endeavor should be made to give the student frequent opportunities to develop thought in the classroom. It is meant to stress that the course in auditing is not

one in which the good work of the student should depend on the fact that he remembers all that he has read or heard. The application of the principles varies to such an extent that if the student attempts to make an application in the exact form in which he has obtained it, because he works from memory, the result is likely to be unsatisfactory.

A course in auditing should aim to develop in the student methods of work which indicate precision. In addition, an effort should be made to have the student express himself in a specific manner. The work of the public accountant is of such a nature that it cannot be completed in a manner satisfactory to the client unless the public accountant works in a systematic manner to minimize waste effort and lost time. The papers which he prepares should be in a form that can be understood readily by those who have similar training. The public accountant should be clear and specific when replying to questions of bankers, clients and employees of the client if he is to maintain the high regard in which he should be held. Therefore, much attention should be devoted to developing in the student some precision of action, and the habit of being clear and concise when writing or talking.

Judgment has been stated to be the most important qualification of the public accountant. Good judgment can be developed in many persons; it should come from the analysis of decisions made with the thought of making improvement where the results obtained indicate that the judgment has not been good. The instructor in the course in auditing can render valuable assistance by correcting students' replies and indicating errors of judgment.

It was considered at one time that auditing could be taught satisfactorily through the use of a lecture course wherein the students took copious notes on important points. But the nature of the subject matter does not lend itself to satisfactory

treatment through the use of a lecture course, and it is doubtful if anyone teaching auditing at the present time would attempt to keep the interest of a class during a whole school year through lectures.

The course in auditing should be based on a textbook which should be read by the students and discussed by the instructor. The textbook should be arranged so that the subject is developed logically in order to avoid the unnecessary confusion and discouragement which comes to a student in an advanced subject when he finds himself reading in the early pages material which he cannot readily comprehend at that stage of his development.

The discussion of the text should wherever possible consist of questions to the students which are phrased to bring out thought and discussion. It should be the aim to have all students answer questions; frequently those who are inclined to be reticent will give answers which will serve to assist both the instructor and other students. When all the members of a class are in the habit of asking questions and replying to questions the atmosphere of the classroom approaches that of a round-table discussion. This procedure has been followed successfully with large classes having as many as forty to seventy students; it places a burden on the instructor to word his questions so as to draw out the student and to elicit material to develop discussion.

It is not advisable, however, that the course in auditing be restricted to the reading and the discussion of the text. Such reading and discussion may provide the student with knowledge of auditing procedure, but this will be of little value unless he can visualize its application to everyday business transactions. It is therefore necessary that the reading matter be supplemented with additional instruction.

Many of the sciences are taught through the use of laboratory work wherein the

students come in actual contact with the materials which are the subject of discussion. The records of business transactions in the form of accounts are to the accountant what the substances and chemicals are to the scientist. It is therefore important that the student in an auditing course have the opportunity to review and analyze practice material which approximates the business transactions with which he may come in contact in his later years. The instruction should include training in the examination of recorded transactions and data supporting transactions.

One of the serious complaints which many students make is that they are given more homework than they can accomplish with benefit to themselves. There is some justification for this complaint. In some instances the instructor apparently considers that his course is the only subject for which the student studies at home. The practice material which may be used to illustrate the application of accounting principles to business transactions is of such a nature that it is rather difficult for the student to follow it to advantage without the continuous guidance of the instructor. If the student is to obtain the full benefit, the significance of every little analysis or notation or compilation of figures should be elucidated while he is doing the work. Work on the practice material should, therefore, be done in the classroom except possibly that which comes at the end and which corresponds to what the public accountant does at his own office after he has completed his work in the office of the client.

The work on the practice material in the classroom gives the instructor an opportunity to bring out numerous illustrations of peculiarities of individuals in the offices of the client. It should also provide occasions for discussions of different business transactions and their effect on the business or on individual employees. The work on the practice set should serve to

place before the students the necessity of determining what they would do or say under certain circumstances and to develop in their minds the proper procedure in each instance. It is in such work that an endeavor may be made to develop precision and the use of expressions which are clear and specific.

It will be found frequently that after the discussion of the text and the work incidental to the use of practice material there is still some time available. Sometimes attempts will be made to review the discussions, but the students usually show little or no interest in such efforts. Where time permits, it is advisable to have some questions which illustrate the discussions, and, if possible, bring out the action which would be taken on transactions which are different from those previously discussed.

The use of questions should have as their principal object the development of thought and judgment on the part of the student. Questions which may be answered almost verbatim from the text do not have much value in a course in auditing. If results are to be obtained, the questions cannot be long or involved, and problem material may sometimes be used for this purpose. Finally the instructor should allow the students ample time for thought before replying to the questions.

Through the use of such questions, the student may develop the habit of concentration on a problem which may be before him with the thought that he must bring out the best possible answer. The instructor should endeavor to guide the students in the interpretation of the questions and in the phrasing of the replies. The student who talks in a rambling fashion to the discomfort of the others should be curbed. The student whose answers are too short or vague should be encouraged to give a full answer.

In planning a course in auditing it is necessary to avoid covering so much

ground that it is practically impossible for the average student to retain a substantial knowledge of the larger part of the material used. From the beginning, it should be realized that the average student cannot become a thorough public accountant through attending a course in auditing. Hence, the course should be organized so that the average student will receive something which he can and will retain and to which he may add when he starts his practical experience as a public accountant.

The question will arise as to whether students should be given tests each week or each month to ascertain whether they are making progress in their work. Owing to the extremely practical aspect of the subject it is difficult to see how satisfactory test material may be prepared to be used at short intervals which will bring out the thoughts or the probable actions of the students. It would seem more desirable to have real tests at the end of each half year and to devote considerable time to the review or the criticism of such tests so that the students might profit from suggestions made as a result of the time devoted to their material.

If the tests are given semi-annually it should be the aim of the instructors to include material which will bring out illustrations of circumstances which may be encountered in business transactions. The student should be required to give careful consideration to every aspect of the question. His grade should depend on the amount of thought which is developed and on the clarity and directness of his reply. These are the important considerations in the work of a public accountant and they should weigh heavily in the work of the prospective practitioner.

In some cases it may be desirable that the student have a certain amount of homework in addition to the reading of the text. In such instances, the instructor may

decide that each student should prepare one or two reports during the school year. These reports may cover the nature of the examination which a public accountant might make in going over the accounts of a certain type of business with which the student may have some familiarity, or certain aspects of such an examination. The instructor must guide the student in the choice of his subject with the understanding that the student is to do certain research work in the preparation of his report.

The qualifications of an instructor of a course in auditing must now be considered. It goes without saying that the instructor should have a thorough grasp of the principles of accounting. Naturally many questions will arise in the classroom as to the interpretation of accounting principles, the preparation of accounting statements and other topics, which were a part of the other courses in accounting taken by the student.

The instructor should have a comprehensive knowledge of the atmosphere of the office of the public accountant and of the peculiarities of public accountants and their assistants. The fact that the instructor imparts information of this nature will go far in assisting the student to absorb some of the professional atmosphere. The instructor need not necessarily be or have been a public accountant to have such knowledge. He may obtain much information from others which will serve the purpose.

All during the course it should be the aim of the instructor to give illustrations from actual occurrences to develop the subject matter. The fact that the instructor says "I know of a case wherein, etc.," and the student feels that the topic is being illustrated from something which really happened, will tend to add a practical touch to the course and increase the interest of the student.

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ACCOUNTING FOR REPOSSESSIONS AND TRADE-INS

DAVID HARTMAN

IN AUTOMOBILE accounting the used-car traded in and the repossession require special consideration if operating statements and balance-sheet accounts are to mean anything. A clearer presentation of the problems involved is made possible by outlining the financial background of the automobile business.

Car dealers find it necessary to borrow heavily on their inventory of cars. The usual procedure is to arrange with some finance company to advance up to 100% of the "blue-book" value of each car placed on the floor of the dealers showroom or on his lot. Used-car advances will probably be limited to 80% of "blue-book" value. The dealer signs what is known in the trade as a "flooring note," securing this note with title to the car, and receiving a trust receipt for the car. Under this arrangement the dealer may sell the car, but the finance company does not transfer title until the flooring note is paid, usually from the proceeds of the sale.

Very likely the sale will be on a contract, the purchaser trading in an old car, plus a certain amount of cash, if the trade-in value is not sufficient to meet the down payment. In the case of sales of used cars, the purchaser in far too many instances just exchanges his old car for a reconditioned one and signs a contract for monthly payments for even eighteen or twenty-four months.

The dealer in turn has an arrangement with his finance company to discount the purchaser's contract. In addition to the selling price of the car the contract will include: sales tax; motor-vehicle license or transfer fee; insurance; and interest (referred to as "carrying charge" or "time-sales mark-up"). The carrying charge is set according to the rates fixed by the

finance company. When the finance company discounts the contract, a certain part of this charge, known variously as "Dealer's Reserve," "Dealer's Difference," etc., will be placed to the credit of the dealer. Supposedly the dealer can draw on this account when the contract is paid off, but in practice the dealers, particularly the small ones, count very little on realizing anything from their reserve accounts. Many small dealers, especially, know so little about the status of this account that they cannot intelligently negotiate with finance companies concerning any possible drawing.

In the case of a sale on contract of a floored car, the dealer sends the finance company the purchaser's contract. The company cancels the flooring note and sends the dealer a check for the difference between the amount due him on the contract and his obligation on the flooring note. It sometimes happens that the contract will not cover the flooring note since price reductions must sometimes be effected to move cars which have remained on the floor too long. In cases of this nature the dealer sends his check along with the contract to cover the note.

From the foregoing description one can easily see that the car dealer's position is often precarious. The purchaser who doesn't have too much in the car he bought may default on his payments. The finance company then looks to the dealer to take the car back (the worse for several months ill usage by an unscrupulous buyer), pay off the balance of the defaulted contract, and repair the wreck. The dealer will be extremely fortunate if he can resell the car at a price sufficient to cover the balance he paid on the contract plus the reconditioning costs.

The used car is the dealer's Nemesis. Although urged, cajoled, and commanded by "higher-ups" to stop making such deals he has been unable to improve the situation. Let the economic situation appear only slightly encouraging and the automobile salesman soon has himself set for trouble when the next slump comes, for the "repo's" as he dubs his repossessions, begin to accumulate. Fortunate, indeed, will be the dealer who can keep his "sales" above the "cost of sales" during the ensuing months. These are the economic consequences of second-hand cars, their reconditioning, and repossessions.

The used car presents accounting problems peculiar to automobile merchandising. Much of the dealing is a barter affair, one car being sold and another taken in plus a cash difference. This feature obtains particularly in selling new cars, and it is not at all uncommon for the allowance on a trade-in to exceed the price the car will bring forth. To take a car in at a figure in excess of what it is worth is tantamount to a discount on the car sold. Unless the necessary adjustment of such figures is made, gross profit is misstated, the inventory is inflated, and financial statements are misleading.

On the other hand there is something to be said for the salesman's side of the story. When making a deal he pays less attention to what the trade-in is worth in cash than he does to how much he has invested in the car he is selling. This is particularly true when he is selling a used car. Let us suppose the selling car is one on which he made an exceptionally good deal. The car is easily worth the money he is asking for it; the buyer cannot complain about that. But the buyer wants too much for his trade-in. In this particular case the prospective buyer is one the dealer wants very much for a customer. Possibly his credit is excellent; he will bring other

business; or similar inducements make the dealer willing to sacrifice to effect a deal. So the dealer, maneuvering about as best he can, eventually allows more for the trade-in than he normally would.

In a situation of this kind the accountant naturally wants to rid the inventory of the inflated price of the trade-in. But the salesman must keep an eye on the allowance he made for the car; he must recoup as much of his loss as good salesmanship can. He wants the individual car sheet (in the car business every car should be recorded on an individual inventory and history sheet) to show as the cost of the car, the trade-in allowance, and all reconditioning costs. In other words the salesman isn't interested in having the actual worth of the car shown; he wants records to show the figures he needs in making sales. And what is true of the trade-in in this respect is also true of the repossession.

To meet the needs of the salesman and the desire of the accountant to have records from which he can draw statements that reflect the true status of the business, it is necessary to make several modifications in the accounting procedures.

At the time of the sale of the car on which a trade-in is received, the following entry would normally be made:

Charge	
Car Purchases \$250.00
Cash 200.00
Credit	
Car Sales \$450.00

To record sale of Car #111 and purchase of trade-in Car #141

But suppose the trade-in allowance is \$50.00 in excess of the cash value of the car. It should be taken into inventory at \$200.00; but, if it is so recorded, the salesman is deprived of the figure he wishes to keep foremost in the records. To remedy the situation the following entry replaces the foregoing one:

Charge
Car Purchases
Cash.....
Excess
Credit
Car Sales
Reserve.....
allowance

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<i>Charge</i>	
Car Purchases.....	\$250.00
Cash.....	200.00
Excess Trade-In Allowances.....	50.00
<i>Credit</i>	
Car Sales.....	\$450.00
Reserve for Trade-In and Repossession Allowances.....	50.00

The individual car sheet will carry the car as costing \$250.00 and also a memorandum of the \$50.00 excess allowance. At the close of the period when the operating statement is prepared, the account "Excess Trade-In Allowances" is deducted along with Cost of Sales from Sales to obtain gross profit. This procedure causes the sales to bear the expense of making them which is involved in excessive trade-in allowances.

Cost of sales will also need adjusting. As each car sheet, providing it is the record of a trade-in or repossession, carries a notation of the excess allowance made, the following entry is possible when the car is sold:

<i>Charge</i>	
Cash.....	\$300.00
Reserve for Trade-In and Repossession Allowances.....	50.00
<i>Credit</i>	
Car Sales.....	\$300.00
Cost of Sales Adjustments.....	50.00

To record sale of Car #141

This entry removes from the account "Reserve for Trade-In and Repossession Allowances" the amount of excess allowance applicable to the car being sold and places it in the account "Cost of Sales Adjustments," the latter being deducted from Cost of Sales to obtain a true cost of sales figure.

To illustrate the foregoing suppose the sales for the fiscal period have amounted to \$50,000 and cost of sales, represented by the purchase price plus reconditioning costs, amounted to \$40,000. Let it also be assumed there is included in the cost of sales a total of \$750.00 of excess trade-in allowance, and that in making the

\$50,000 of sales \$1000 excess trade-in allowance was given on the trade-ins received. The operating statement properly adjusted would appear thus:

Sales.....	\$50,000.00
Less, Cost of Sales.....	\$40,000.00
Deduct, Cost of Sales Adjustments.....	750.00
Adjusted Cost of Sales.....	\$39,250.00
Excess Trade-In Allowances.....	1,000.00
	40,250.00
Gross Profit.....	\$ 9,750.00

Referring again to the account, "Reserve for Trade-In and Repossession Allowances," any balance in this account represents the excessive allowances on cars still in the inventory. Being a valuation account similar to Reserve for Depreciation, it is properly deducted from the car inventory account at the close of the fiscal period.

When dealing with repossession it is necessary, likewise, to provide for special accounting features needed. Every automobile sale should be considered a potential repossession. And, further, those sales creating this contingency should provide for any such loss. Each dealer should determine a standard gross profit from his past sales, leaving out the sale of repossession. With this ratio he can determine what would have been his gross profit on his repossession had they been first sales. This latter figure compared with the actual gross profit or loss on repossession will tell the loss due to repossession. The ratio of this loss to total sales is a significant percentage, and should have a prominent place in every profit-and-loss statement. That item will be one of the expenses of the business: "Loss on Repossessions."

If loss on repossession should prove to be 5% of sales, then in the foregoing illustration, the loss would be \$2500 (5% of \$50,000), and the following entry would be necessary:

Charge
Loss on Repossessions..... \$2,500.00

Credit
Reserve for Loss on Repossessions..... \$2,500.00
To record the estimated loss on repossession estimated at 5% of sales of \$50,000

The foregoing procedure makes possible charging against gross income the loss from the repossession which will result from the sales of the period. The account, "Loss on Repossessions," is an expense of the period. The account, "Reserve for Loss on Repossessions," acts as a suspense account against which amounts in excess of the cash value of repossession can be charged as these cars revert to the dealer. When the defaulted contract is paid off the entry will be:

Charge
Car Purchases..... \$125.00
Reserve for Loss on Repossessions.. 75.00

Credit
Cash..... \$125.00
Reserve for Trade-In and Repossession Allowances..... 75.00
To record payment of balance due on John Doe's defaulted contract on Car #118 discounted with the Auto Finance Co.; and to charge the difference between the appraised value of the car and its cost to Reserve for Loss on Repossessions

In the foregoing entry the repossessioned car cost the dealer \$125.00; it was worth \$50.00, a loss of \$75.00. The amount of loss is charged against "Reserve for Loss on Repossessions," as previously outlined. As in the case of a trade-in on which an excess allowance was made, the repossession is carried on the car sheet at the cost figure, \$125.00, and a memorandum entry of the excess cost of \$75.00 is also made. As the inventory is inflated by this amount, it is credited in the foregoing entry to the account, "Reserve for Trade-In and Repossession Allowances." From this point the accounting procedure is the same as in the case of the trade-in with an excess allowance.

It will no doubt be dampening to the salesman's ardor to take a \$2500 loss on

repossession and have excessive allowances deducted from his hard summer's work. But when the repossession go on the block in January they will be valued at what each is worth, spot cash. In some instances this may be pretty close to zero. The dealer can, under the recommended procedure, recondition the old trade-ins, or junk them, as well as the repossession, and still show a profit and a correct one, even on the sales of such.

Caring for the foregoing entries in an expeditious manner calls for proper system installation suited to automobile transactions. The journal illustrated hereinafter has been found satisfactory for recording sales and the related transaction, the discounting of the buyer's contract, as well as for the special needs referred to in the previous discussion. To illustrate the use of the journal assume the following transactions:

Sold to Jas. A. Blye	
One Used Car.....	\$1,000.00
Accessories.....	75.00
Sales Tax.....	32.25
Motor Vehicle License (transfer fee).....	2.00
Insurance.....	62.50
Pay-off on trade-in.....	100.00
 Total.....	\$1,271.75
Less, Cash.....	\$300.00
Trade-In.....	350.00
Note.....	50.00
 Total.....	700.00
Balance.....	571.75
Time-sales mark-up.....	45.74
 Contract.....	\$ 617.49

Let the cost of the car sold after reconditioning be \$930.00 and at the time it was taken in as a trade-in assume an excess allowance of \$125.00; also, let the appraised value of the trade-in on this sale be \$275.00. And further, assume that the contract in the sale is discounted with the finance company (whose statement follows) was paid by check.

Flooring note on car.....	\$650.00
Insurance.....	62.50
Interest.....	32.45
Dealer's Reserve.....	13.29
	<hr/>
Less Contract.....	617.49
	<hr/>
Balance due.....	\$140.75

The entries for these transactions appear in Figure 1.

(Left page)

JANUARY 1938

Day	Car No.	Sold to	Trade-In No.	New Car Sales	Used Car Sales	Accessories	Sales Tax	Motor Vehicle License	Insurance	CAR SALES AND			
										Credit	Credit	Credit	
5	104	Jas. A. Blye	211			Cr 1000.00	Cr 75.00	Cr 32.25	Cr 2.00	Cr 62.50	Dr 300.00	Cr 350.00	Dr 140.75
		Contract discounted								62.50			

(Right page)

CONTRACTS DISCOUNTED

Trade-In Pay-offs	Notes Receivable	Carrying Charge	Contracts Receivable	Contracts Receivable Discounted	Dealer's Reserve	Flooring Notes		Cost of Sales (Memo)	Cost of Sales Adjustments	Miscellaneous		
										Dr	Cr	Accounts
100.00	Cr 50.00	Dr 45.74	Cr 617.49		Cr 13.29	Dr 650.00		930.00	Dr - Cr 125.00			
		32.45		617.49								

FIGURE 1

JANUARY 1938

CAR PURCHASES

Day	Car No.	Bought from	Sold to	New Car Purchases	Used Car Purchases	Excess Allowance on Trade-Ins	Loss on Repossessions	Flooring Notes	Check Record Clearing	Car Sales Clearing	Miscellaneous	
											Cr	Account
5	211	Blye, Jas. A.			Dr 350.00	Dr 75.00	Dr - Cr 350.00			Cr 350.00		

FIGURE 2

<i>Charge</i>	
Reserve for Trade-In and Repossession Allowances.....	\$x.xx
<i>Credit</i>	
Cost of Sales Adjustments.....	\$x.xx

Thus the special column makes possible the entry found in the third journal entry.

It will be noticed that this journal is tied to the Cash Receipts, the Check Record, and the Car Purchases by clearing columns, a contra column being carried in each of these books to offset the columns in the Sales book.

The trade-in received from Blye will be entered in the Car Purchases. Attention is called to the contra clearing column, "Car Sales Clearing," just referred to. Note that the same \$350.00 appears in this column as does in the "Car Purchases Clearing" column in the Sales book (Figure 2).

The special column, "Excess Allowances on Trade-Ins," will be posted:

<i>Charge</i>	
Excess Trade-In Allowances.....	\$x.xx
<i>Credit</i>	
Reserve for Trade-In and Repossession Allowances.....	\$x.xx

This column makes possible the adjustment discussed and illustrated as part of the second journal entry.

The total of the special column, "Loss on Repossessions," would be posted:

<i>Charge</i>	
Reserve for Loss on Repossessions.....	\$x.xx
<i>Credit</i>	
Reserve for Trade-In and Repossession Allowances.....	\$x.xx

The surgery outlined in this discussion may seem hard in June, but it will be welcome in the chilly repossession season after Christmas.

THE FLOW OF PROPERTY AS A BASIS OF INTERNAL CONTROL

WARNER H. HORD

DURING recent years there has been wide discussion both within and without the accounting profession concerning the exact nature of an accounting principle and what may be considered generally accepted accounting principles. This discussion has served to focus attention upon both the importance of accountancy and the extreme difficulty of many of the problems with which it must deal. Many of these problems have been greatly clarified while many others, frequently overlooked because of their hidden nature, have been more sharply revealed. But there is still no definite answer to the question of what constitutes an accounting principle and whether, in fact, there really are any basic accounting principles. However, if we read between the lines in many recent discussions, there seems to appear,

strangely enough, the clear implication that accounting principles embody elements of business expediency, applications of individual judgments, verdicts of court decisions, general or accepted practice within an industry, needs of particular interests, and dictates of business management. Such an approach appears to deny the existence of basic accounting principles capable of exerting control over accounting practice from within. Instead this approach compels, by implication if not expressly, the conclusion that accounting is a composite of policy, not basic principles, resulting from practice which has developed in response to the needs and demands of the various conflicting and competing interests which accountancy serves. In other words, it appears that the weight of opinion holds that

accountancy is built up from without, that it is a tool of its external creators, and that there is little of basic principle capable of exerting effective and consistent control from within the accounting process itself.

The above statements are not intended to be harsh indictments of current practice or current statements of accounting principles and theory. Instead they are intended to raise sharply the question of what is an accounting principle—is it something that directs and controls accounting practice from within and therefore basic and consistent in all accounting practice, or is it something imposed upon accounting practice from without and therefore specialized and applicable only to the particular situations which it serves? If the former constitutes an accounting principle, then accounting practice should be controlled from within in accordance with the basic concepts inherent in its origin rather than from without, and this control—not merely routine—should be consistent throughout all accounting practice unless and until a departure is both recognized and justified. If accounting principles are, on the contrary, no more than routines of procedure with which to give effect to expedites imposed from without, they can provide no basis for a consistent internal accounting control and, hence, it would seem, that the concept of basic principle in accounting is not valid.

In many respects, it would appear, that this clash in points of view over what constitutes an accounting principle is an inherent part of the confusion which results from viewing accountancy as an internal tool of business management on the one hand and as the basic knowledge of an independent profession on the other hand. As a profession, accountancy transcends the needs and jurisdiction of any particular business or industry, and, as such, requires an internal body of principles to

provide a consistent basis for the intelligent communication of factual information; but as a tool of internal management accurate interpretation can be made by use of information provided from sources wholly external to the accounting process.

It is therefore the purpose of this article to discuss the possibility of developing a basis of internal accounting control centering around the flow of property in actually executed business transactions. No new philosophy or concept of accountancy is being proposed; instead, every effort has been exerted to weed out of current accounting practice all non-accounting concepts and, then, to work out a procedure based entirely upon technical accounting concepts. In other words, an attempt has been made to work out a purely accounting solution for purely accounting matters. The procedure begins with the development from the fundamental accounting equation of technical accounting concepts which are believed to be essentially inherent in the equation and practically universally accepted. These concepts are then carried forward and applied consistently throughout the entire scope of accounting procedure. It is believed, that therefore, the procedure here developed follows from a consistent application of the basic ideas inherent in the fundamental accounting equation. But in spite of the apparently orthodox procedure followed, some of the results are wholly unorthodox in terms of current accounting practice. Hence, the real issue may be stated as follows: Are certain phases of current accounting practice in direct conflict with or in complete disregard of basic accounting principles?

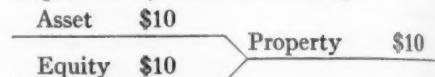
TECHNICAL ACCOUNTING CONCEPTS

It appears wholly unlikely that the various elements of accounting practice, as developed in separate business units, can ever be reduced to a single consistent

body of principles; indeed, the dominant forces underlying the earlier stages of accounting practice worked in direct opposition to the development of a consistent accounting basis. It seems reasonable to assume that, on the contrary, if there does exist an internal basis from which to exert accounting control, it must be consistent with and inherent in the basic concept from which accounting practice itself sprang. Thus, if we leave, for the moment, the widely varied field of accounting practice with its innumerable adaptations to all types of circumstances, both accounting and otherwise, and go back to the starting point, we shall find that all accounting is based upon the dual concept of property: property as a thing of value to the business, an asset; property as an ownership right to such thing, an equity. The amounts¹ of the two are essentially equal; they are simply different aspects of the same thing. Each of these concepts becomes a separate element of the basic accounting equation or assumption underlying all accounting procedure, namely, *Assets = Equities*.

It is evident, from the above discussion, that the terms "asset" and "equity" have technical accounting meanings wholly different from those assigned to the same terms in popular usage. The accounting term "asset" refers only to the thing which is capable of ownership but never includes the ownership of that thing. On the other hand, the accounting term "equity" refers only to the ownership aspect of a thing but never includes the thing itself. Since an economic good without ownership has no legal status and since ownership behind which there is no economic good is pure fiction, it follows that only the combination of the two can provide a basis of exchange in business transactions. It is this combination of an

accounting asset element and an accounting equity element that corresponds to both the legal and popular concept of property. The following diagram may help to clarify these relationships:



However, the terms "asset" and "equity" are so widely used interchangeably with the term property that their popular meanings have almost completely smoothed the technical accounting meanings attaching to the same terms.

Furthermore, the use of account names among the accounting equities, which are more descriptive of the legal nature than of the accounting nature of the equities, provides another source of serious confusion in the meanings of accounting terms. The confusion from this source, however, will be largely removed if it is realized that the legal control is confined solely to the names while the accounting control extends wholly and solely to the amounts. The legal phraseology refers to the claims of outsiders against the owners of the property described by the fictitious accounting entity while the accounting equities make up one of the two elements of that property. Strictly speaking, accounting assets and equities can respond only to the transaction flow of actual business properties and, although the accounting equities may usually be summarized in terms of the legal equities, they cease to be accounting equities the moment they reflect legal rather than accounting changes in amounts, if the two are in conflict. Thus, in case of insolvency, the accounting assets may be less than the legal equities but not less than the accounting equities. It is also true that the face amount of legal claims may be changed independently of transaction changes in the invested property, but this does not change the actual accounting amounts invested

¹ The term value is being avoided throughout this article in the interest of clarity.

in the business by the particular suppliers of capital involved.

Hence, an accounting equity is a claim against a thing rather than an individual, while an asset is the thing itself, wholly exclusive of the ownership to the thing. As a result, the total amount of things must be equal to the total amount of ownership rights against these things. Thus there comes into existence a technical accounting concept embracing only the things, called assets; while simultaneously there comes into existence a second technical accounting concept embracing only the ownership claims to these things, called equities. The equating of these two technical accounting concepts brings into existence the fictitious accounting entity within which accounting control, whatever its nature, must be exercised.

Behind this dual-natured accounting entity, there exists a second fictitious entity, the business entity. This business entity is related to the fictitious accounting entity in such manner as to be vested, in an accounting sense, with the sole responsibility of possessing and managing the property, and, of carrying out the business transactions relating to this property through which changes in the accounting entity are produced. The accounting asset-and-equity concepts are inseparable components of any property which can become the subject matter of a transaction executed by the fictitious business entity. It is this inseparable nature of the two accounting concepts from the property subject matter of the actually executed business transactions that provides the basis for internal accounting control. The actually executed business transaction is the only channel of communication between the fictitious accounting entity and the fictitious business entity and, likewise, between the fictitious business entity and all outsiders with whom business transactions may be com-

pleted. Thus, the fictitious accounting entity acts as a meter within this channel through which all transactions between the fictitious business entity and outsiders must be consummated. The accounting entity has the advantage of being able to register the passage of an entire property if either its asset or its equity element is identified, while the business entity is incapable of performing a business transaction unless one or the other of these two elements of the property involved is identified. Hence, for business transactions in which only the asset element of the property subject matter is identified, effective internal accounting control requires that the identified asset element be equated with the unidentified equity element of the property involved; and for transactions in which only the equity element of the property is identified, effective accounting control requires that the identified equity element be equated with the unidentified asset element of the property involved. The instant there is failure to equate the asset and equity elements of each property involved in an actually executed business transaction, the accounting control becomes as ineffective as a pair of scissors with the blades taken apart.

If the above reasoning is correct, it is clear that the popular meanings of the terms "asset" and "equity" give no indication of the technical accounting meanings of the same terms. This confusion of meaning has created almost insuperable obstacles to the identification of the true effect of actually executed business transactions upon the assets and equities of a business enterprise. It has produced the rather wide practice, among both accountants and laymen, of tracing the effects of transactions to only one side of the basic accounting equation; whereas, such transactions must of necessity affect both sides of this equation. This practice, in turn,

has resulted in the unconscious substitution of the bookkeeping rule of equal debits and credits for basic accounting principle at various places in the accounting process.

The terms "asset" and "equity" are used in this article only in their accounting sense, as defined above, unless the contrary is indicated. The term "property" is used to denote the popular concept of the term "asset," that is, a combination of an accounting asset and an accounting equity to form the property transferred by business transactions. Because of this technical meaning of terms, it will be well to keep in mind that a number of the passages to follow may contain a technical meaning not apparent if the above terms are read in their popular sense.

THE ACCOUNTING NATURE OF FINANCIAL BUSINESS TRANSACTIONS

An analysis of accounting practice will show that the transactions which a business enterprise may perform are quite commonly divided into the following four basic groups:

1. Transactions exchanging equities for assets.
2. Transactions exchanging one kind of asset for another.
3. Transactions exchanging assets for equities.
4. Transactions exchanging one kind of equity for another.

At first glance, these four statements will appear to be a technical definition of business transactions in terms of basic accounting principles, but more careful examination will reveal that this classification does nothing more than reflect the bookkeeping debits and credits usually made in recording business transactions. These classifications are stated in terms of the equated assets and equities within the fictitious accounting entity. But the accounting entity cannot engage in business transactions; it can execute no exchanges

of its own. It can only reflect the effects of the transactions executed by the fictitious business unit. On the other hand, this fictitious business unit cannot exchange separately an accounting asset or an accounting equity; it must always exchange the two together in a combination constituting property. Hence, to use the accounting terms "asset" and "equity" separately to describe the subject matter of a business transaction produces a meaningless anomaly; any attempt to use these same terms in a popular sense to explain technical accounting procedure is likewise meaningless. Thus, property must always be the subject matter of a business transaction which produces an accounting effect, while the asset and equity elements of this same property must always be admitted to and recorded in the accounting entity. The above classifications, though widely used in accounting circles are so confused between the popular and technical usages of the terms involved as to be almost devoid of meaning. The nature of this confusion will become more apparent if the above classifications are contrasted with the following corresponding classifications designed to reveal the true nature of the transactions involved:

1. Organization or investment transactions, by which new increments of property are admitted to the fictitious accounting entity as a result of investments by the suppliers of capital.
2. Profit-and-loss transactions, by which one kind of property already within the fictitious accounting entity is exchanged for another kind of property to be admitted to the fictitious accounting entity.
3. Dissolution transactions, by which old increments of property are deleted from the fictitious accounting entity as a result of distributions to the suppliers of capital.
4. Purely legal transactions, by which the suppliers of capital agree to cancel their old contract of investment and accept a new contract in its place without producing any accounting effect whatever upon the accounting assets and equities of the property involved.

**ABILITY OF BUSINESS TRANSACTIONS
TO PRODUCE ACCOUNTING
PROFIT OR LOSS**

These four classes of transactions will now be analyzed in terms of their ability to produce an accounting profit or loss. The accounting basis for measuring profit and loss requires no lengthy treatment and, therefore, will be developed in connection with the discussion of the individual classes of transactions.

The first group of transactions, in which "equities are exchanged for assets" or by which new increments of property are admitted to the fictitious accounting entity, compose the enabling transactions by which the fictitious accounting entity and the basic accounting equation are brought into existence in relation to the property so acquired. All such transactions, irrespective of the time in the history of the business enterprise when they occur, are organizing transactions in an accounting sense. They are the means by which the business enterprise acquires entirely new increments of property which had no previous history within either the fictitious business or accounting entity. Such newly acquired property must be admitted to the accounting entity and given a carrying amount on both sides of the basic accounting equation as a prerequisite to its entry into computations of accounting profit and loss. Technically these transactions are not exchanges at all in an accounting sense, but, more exactly, an admission of property acquired by business transactions to the fictitious accounting entity by a separation of its asset from its equity element. Hence, the accounting entity receives both an asset and an equity but it gives nothing in exchange for these two elements of the property acquired. This group does not represent exchange or purchase transactions but rather investment transactions, in which the outlay of the business entity is purely of a legal nature

and therefore incapable of accounting measurement. It is possible and desirable, however, to set up the accounting equity to the property admitted to the fictitious accounting entity in such manner as to reflect the outside legal claim against the fictitious business entity or the new owners of the property. But this legal dress does not, in the least, change the accounting nature of the equity involved on the books of account. Since nothing is exchanged which had a prior carrying basis within the fictitious accounting entity, this group of transactions are incapable of producing accounting profit or loss irrespective of the time or circumstances during which they occur. There simply do not exist two different amounts which can be offset against each other to give a difference that can be called a profit or a loss.

The second group of transactions, in which one property (not one asset) is exchanged for another, all take place subsequent to the creation of an accounting basis. There is, in all cases, a carrying amount for the property parted with (whether it be a physical good or intangible service or both) to provide a true accounting basis for measuring cost. Likewise, there is, in all cases, a second property which, when received in exchange and admitted to the fictitious accounting entity at its transaction price, provides a basis for measuring income.² Thus, the income is the amount commanded by the item transferred and admitted to the fictitious accounting entity by an actually executed business transaction. These two carrying amounts, one for the old property parted with and the other for the new prop-

² This discussion assumes that the property exchanges will be made on a price basis. If two properties were exchanged without being reduced to a price basis, the new property would take on exactly the same carrying amount as the old. Also, the term income is used in the same sense as gross revenue because it was felt that presentation would be aided by use of terms cost and income to compare concepts of gross revenue outlay and gross revenue returns.

erty acquired, supply the cost and income amounts from which to compute accounting profit or loss. It is significant to note, however, that for every one of these transactions, both the asset and equity elements of the property transferred are released to remove completely the carrying basis of the old property, while both the asset and equity elements of the newly acquired property are placed on the books to form the first carrying basis of the new property. Hence, the profit or loss on the transaction is reflected on both sides of the basic accounting equation as the difference between the old asset and equity carrying amounts of the property transferred and the new asset and equity carrying amounts of the property acquired. It follows, therefore, that the full carrying amount of both the asset and equity elements of the property acquired must be admitted to the same accounting entity to provide the carrying amount for the new property.

The third group of transactions is the exact converse of the first group. These transactions, instead of representing an exchange of an asset for an equity, actually represent a distribution of property in liquidation of both the asset and equity elements attaching to this property. It was pointed out above that profit or loss must result from comparing two different carrying amounts, one for the property transferred and one for the newly acquired property. In the present case, the assets given in liquidation of the equities do have a prior carrying amount but the effect of the transaction is to eliminate the whole property, i.e., both the accounting asset and equity elements, from the fictitious accounting entity without acquiring any new property in exchange. Hence, no accounting profit or loss can result from these transactions because, although there is a basis for measuring cost, nothing is acquired in exchange which can take on a

new carrying amount to provide an accounting basis for measuring income. It appears, therefore, that accounting profit and loss cannot result from the distribution of property in liquidation of the business obligations to the suppliers of capital.³

The fourth group of transactions may be properly described as an exchange of one equity for another, provided, it is understood that the equities represent legal claims of outsiders against the owners of the property involved, rather than accounting equities against the accounting assets within the fictitious accounting entity. Such transactions do not involve an actual exchange of property between the fictitious business entity and outsiders, and, therefore, do not come within the scope of transactions to which accounting control responds. On the contrary, however, these legalistic transactions may not be projected within the scope of accounting control to produce an effect which is in conflict with the principles of accounting. Thus it is permissible to allow a non-accounting entry which will reflect the changed legal status in the accounting equities, but it is not permissible to allow this entry to be made in such manner as to give these accounting equities a carrying basis under their new name different from that which existed under their old name. This reasoning leads inevitably to the premise, earlier stated, that the names assigned to the equity side of the balance sheet may well describe the legal status of the accounting equities in terms of outside claims against the owners of the business properties, but, that the amounts of all these equities must be subject, exclusively, to accounting control. Thus ac-

³ This conclusion is in direct conflict with the common accounting practice of carrying directly to surplus the difference between the book value and cash paid in retirement of an equity, thus producing a change in net worth the same as if there had been a realized profit or loss.

countancy and law may join in holy union so long as law prescribes only the names and accountancy controls the amounts to be reported among the equities. But the moment the law dictates both names and amounts the balance sheet ceases to be an accounting statement irrespective of the degree of improvement which may be claimed for its legal status.

SOME APPLICATIONS TO TREASURY-STOCK TRANSACTIONS

Though the foregoing analysis is largely consistent with current accounting practice for handling transactions dealing with identified assets, it is evident that this analysis is in almost direct conflict with current practice for handling transactions dealing in identified equities. For that reason, it is desirable to demonstrate the effects of the principles discussed by showing applications to concrete situations. Limited space makes it necessary to confine these illustrations to a few types of transactions by which a corporation purchases its own common stock.

Illustration 1:

Suppose a corporation, having assets and equities each equal to \$10,000 and having 100 shares of common stock outstanding, purchases 10 shares of its own stock for \$1,000. In this case practically all methods of treatment concur so that there is little disagreement about the results. The transaction would undoubtedly be recorded by the following entry:

Treasury Stock (Minus Capital Stock Account)	\$1,000
Cash	\$1,000

But this simple entry requires much analysis to determine the basic accounting facts resulting from it. The true accounting facts are hidden in the answers to the following questions:

1. What is the business property actually involved in this transaction?

2. What is the true accounting nature of the transaction?
3. What are the true accounting effects of the transaction?
4. Who are the two parties to the transaction?

WHAT IS THE BUSINESS PROPERTY INVOLVED IN TRANSACTION?

It was previously stated that the fictitious accounting entity is capable of registering the passage of a complete property if either the asset or equity element of that property is identified, and, that the fictitious business entity is incapable of executing a transaction unless one or the other of these elements of the property involved is identified. If we apply this principle, it is immediately evident that the networth equity in common stock is definitely identified and there remains only the problem of identifying the asset element of the same property. At this point it is well to remember that the term property does not refer to any specific property which might have been the subject matter of any single transaction in the past. It is a well recognized fact that properties come into the business entity in entirely different combinations, quantities, and forms from those in which the same properties will leave the business entity. Our problem is to identify the specific property which constitutes the subject matter involved in this particular treasury-stock transaction without regard to the identity of the different properties which form the subject matter of prior transactions.

Prior transactions are significant, however, in one respect. Each one should have resulted in equal increments to both the asset and equity elements of the properties admitted to the fictitious accounting entity; these increments in assets and equities should have been recorded at the amount of the transaction price by which the property was acquired. It follows, therefore, that the carrying amount of

every property within the fictitious accounting entity, no matter what its form, quantity, or nature, must be made up of such combination of the equated elements of other properties as will compel an equality of the asset and equity elements of the property in question. If this were not true, the removal of a property having unequal asset and equity elements would destroy the very basis of accounting balance and any attempt to force a balance by arbitrary adjustment of debits and credits would wipe out the effect of internal accounting control and leave purely fictitious quantities behind the accounting figures. Since the property involved in a treasury-stock transaction is undoubtedly within the accounting entity, it follows that there must be an asset element attaching to this property whose carrying amount is exactly equal to that of the identified networth equity.

Perhaps one of the most serious errors underlying current accounting practice is the mistaken identity of cash for the asset element of the property involved in a purchase treasury-stock transaction. But actually the cash involved in the transaction cannot possibly be the asset element of the property attaching to the identified networth element, because first, the current price and cost of cash is always the same, whereas, this is obviously not true of the asset element attaching to the networth equity. Secondly, the networth equities are not simply specialized equities attaching only to the cash asset element. Even if this were true, it would still be meaningless to say that the asset element is used to purchase the equity element of the property cash. A transaction must transfer both the asset and equity elements of the property involved in the same direction in order to produce the effect of an exchange. Actually cash comes into the picture only because it is the medium of exchange through which the transaction is reduced

to a settlement basis. Eliminate cash from the picture and the transaction could still have taken place, and with exactly the same meaning, except that settlement would have been more complicated.

The actual property involved in the treasury-stock transaction is undoubtedly the same as the property that would have been involved had some outsider purchased the same stock. To the outsider, it appears evident, that the property involved was an interest in the total corporate property represented by an amount equal to the carrying amount of the identified networth equity on the one hand and a corresponding share of the undivided assets on the other hand. The corporation, in purchasing the same stock, in the same market, must have purchased exactly the same property.

WHAT IS THE TRUE ACCOUNTING NATURE OF THE TRANSACTION?

It should be apparent by now that a treasury-stock transaction is not an exchange of an asset for an equity as the almost universal practice implies. Assets and equities, in an accounting sense, are no more exchangeable, one with another, than are the two sides of a silver dollar. The two combined make a single property, whereas, neither has any controlled accounting status when taken separately. Hence, the true accounting nature of a transaction in treasury stock may be described as follows: First, a withdrawal from the fictitious business entity of the property described above; secondly, the reduction of this property to a price basis and the settlement in cash. Thus, there really are two complete transactions:

1. A dissolution transaction by which the fictitious business entity is partially dissolved by a withdrawal of some of the suppliers of capital together with a part or all of the property represented by the capital which they contributed.

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2. A purchase transaction by which the reconstituted business entity purchases from the retired suppliers of capital their undivided interest in the total corporate property.

WHAT ARE THE TRUE ACCOUNTING EFFECTS OF THE TRANSACTION?

The accounting effect of a treasury-stock transaction may now be summarized as follows:

1. To withdraw a property whose two elements are carried within the fictitious accounting entity at their original transaction or cost prices.⁴ Since the asset and equity elements are essentially equal, the carrying amounts for both are equal to the carrying amount of the identified networth equity.
2. To repurchase this same property at a cash price which establishes a new cost basis within the fictitious accounting entity.

The net effect of the transaction, therefore, is a constructive withdrawal of the property from both the business and the accounting entities as a result of the dissolution transaction at its cost or carrying amount on the books of account, and then, a constructive return of the same property to the fictitious business and accounting entities at its new cash price as a result of the purchase-settlement transaction by which it was reacquired.

Careful analysis will reveal that the true nature of such transactions is clouded by a confusion of the current cash price paid with the cost carrying amount of the property involved. This results in measuring the amount of the asset element in terms of current cash price and the equity element of the same property in terms of its carrying amount which is cost. It is quite similar to the problem that arises from carrying both sales and purchases in a single merchandise account. Another illustration of exactly similar nature would

be that of attempting to balance physical weight against physical volume. If the materials are identical, weight and volume will balance; likewise, if price is constant for the property involved, cost and price will balance. It is because cost and price are the same in the above illustration that all accounting methods give the same results. But to use these relationships as principles of control can scarcely be depended upon to give reliable results. Yet, unless the foregoing analysis is wholly wrong, current accounting practice is built around this fallacious principle of control.

WHO ARE THE TWO PARTIES TO TREASURY STOCK TRANSACTION?

Space will not permit anything more than a very superficial coverage of this phase of the problem. It is believed, however, that the above analysis is entirely consistent with reasonable legal requirements. The entire procedure comes within these three elementary principles of law: 1. that there must be two parties to every contract; 2. that a corporate entity has the right of dissolution; 3. that dissolution breaks the corporate entity down into separate parties capable of dealing with one another. It is, of course, realized that the law does not call a treasury-stock transaction a partial dissolution of the corporate entity. Nevertheless, the law authorizes the execution of treasury-stock transactions which constitute factual dissolution even though, within the fiction of the law, such may not be recognized as legal dissolution. However, when the creditors of a corporation have to choose between fact and fiction as a basis of security, they are likely to find that the market places a much higher value upon security that exists in fact than upon security that exists only in legal fiction. But irrespective of what the law assumes, it is difficult to identify two parties to the contract behind a treasury-stock transac-

⁴ Carrying amount, as used here and elsewhere, includes profit increments or loss decrements which, also, reflect amounts set by actual transaction prices.

tion unless there is an assumed dissolution of both the parties and properties of the corporate entity. Any other basis will result in the corporation purchasing from members of its own entity property which it already owns. Even if the stockholders be considered outsiders, they still have no property to sell the corporation in relation to the stock which they hold unless there is first a constructive withdrawal from the corporate entity of the property to which their stock equities attach. Thus the retiring stockholders and the diminished corporate entity are the two parties to a treasury-stock transaction.

Illustration 2:

Assume that the same stock as above had been purchased by the corporation at \$800 instead of \$1,000. The accounting effect of the transaction may now be factored by the following entries:

Dissolution Transaction:		
Stockholders Equities.....	\$1000	
Undivided Assets.....		
		\$1000
Re-purchase Transaction:		
Undivided Assets.....	\$1000	
Cash.....	\$ 800	
Asset Reduction.....	200	
Combination Entry for Both Transactions:		
Stockholders Equities.....	\$1000	
Cash.....	\$ 800	
Asset Reduction.....	200	

Obviously this is a basically different result than would be obtained from current accounting practice which would reduce total assets only \$800 and add \$200 to the remaining equities. Just how it is possible for some of the stockholders to make themselves more and more wealthy by buying out the other stockholders at the open competitive market price is not entirely clear. And even if the stockholders believe they are buying at a bargain it appears more reasonable that they should defer their profit until it is earned by an actual realization on the assets retained. An exactly similar practice would be to assume that a sale of an identified asset

at less than its cost does not constitute a loss (deduction from an equity) but rather an increase in the value of another asset. This kind of practice, besides being illogical and unsound, actually destroys all the elements of accounting control with a view toward showing the measured amount of capital actually contributed to, released from, and the net amount still remaining within the business entity. Obviously, if the balance sheet is thus released from accounting control, the same thing is true of the operating statement.

The procedure illustrated above will, on the contrary, bring about an immediate reduction of the total assets, which, in turn, will reduce the periodic charges for depreciation, thus relieving the operating statement of a portion of its fixed charges or losses on collection. If the earning power of the corporation has not been impaired, the difference between the carrying amount and the transaction price of the property involved in the treasury-stock transaction will ultimately be realized in profit. This procedure is consistent with common practice of not taking profits until they have been realized. It further reduces accounting practice for both assets and equities to a consistent basis and thus sets up the essential elements of an effective accounting control.

Illustration 3:

Assume that the same stock was purchased for \$1,200. The entries would be exactly the same as before except that the \$200 would be an asset increase instead of an asset decrease. There is not space to go into the various elements of this procedure. But those who wish to call this a bookkeeping write-up should first look at both sides of the equation at the same time and then decide what is the true effect of the preceding illustration, which is the more common. It is believed that this \$200 increase in the total assets is the

true effect of an actually executed business transaction, the recording of which, good accounting practice requires. The preceding illustration, when recorded according to common practice, results in a bookkeeping write-up of the equities (and therefore of the assets) but in direct contradiction to the true accounting effect of the actually executed business transaction. It appears preferable, therefore, that if the supposed "offense" of a bookkeeping adjustment must be committed in either case, that it be committed in such a manner as will best report the effects of the transaction being recorded.

Illustration 4:

Assume a corporation with a balance sheet as follows:

X-Corporation		
Assets		Equities
Total Assets	\$920,000.00	Capital Stock \$1,000,000.00
Less Deficit		80,000.00
	<u>\$920,000.00</u>	<u>\$ 920,000.00</u>

Assume further, that the corporation has 10,000 shares of stock outstanding and that it is selling on the market at \$10 per share. The corporation buys 1,000 shares of its own stock for the market price of \$10,000. Current accounting practice would record this transaction by the following entry:

Treasury Stock.....	\$100,000.00
Cash.....	\$10,000.00
Surplus (or Capital Surplus).....	<u>90,000.00</u>

The X-Corporation balance sheet, after giving effect to this entry, would appear as follows:

X-Corporation		
Assets		Equities
Total Assets	\$910,000.00	Capital Stock \$900,000.00
		Capital Surplus 10,000.00
	<u>\$910,000.00</u>	<u>\$910,000.00</u>

In a single transaction involving \$10,000 of cash and without the realization of any profit on a sale, in fact, without a sale at all, the corporation was able to wipe out

an \$80,000 deficit and create a \$10,000 surplus! No new capital was paid into the business, no profits were realized and yet the apparent financial position of the business has been greatly improved while the book value of the stock has increased about 10%. Moreover, the corporation actually carries on its books at \$100,000 assets which it has just purchased for \$10,000, and, this it is able to do without the stigma of an unrealized appraisal increment to surplus.

On the other hand, the results that would be realized by applying the principles outlined above follow:

Journal Entry:	
Treasury Stock.....	\$100,000
Cash.....	\$10,000
Surplus (Deficit).....	8,000
Asset Reduction.....	<u>82,000</u>

Balance Sheet:		
X-Corporation		
Assets		Equities
Total Assets ...	\$910,000	Capital Stock. \$900,000
Less Asset Reduction.....	<u>82,000</u>	Less Deficit... 72,000
	<u>\$828,000</u>	<u>\$828,000</u>

The differences in the results between the two methods is self-evident from the tabulations above. The reasons for these differences have already been explained and need no further clarification here.

SUMMARY AND CONCLUSIONS

The basis of the accounting control outlined in this article rests upon the flow of property between the fictitious business entity and outsiders as a result of actually executed business transactions. This accounting control appears to depend upon three simple principles and an undetermined number of corollaries. The three principles may be stated as follows:

1. That the actually executed business transaction and the accounting entry always reflect an identical property subject matter.
2. That all amounts admitted to and released from the fictitious accounting entity represent actual transaction prices.

3. That the asset and equity elements of every property admitted to or released from the fictitious accounting entity must be equated in the process of recording each transaction.

It may be said, in general, that current accounting practice has failed to enforce these principles of internal accounting control, largely, for the following reasons:

1. By confusing assets with properties, current practice has been wholly unable to distinguish between cash as a price settlement device and the actual properties involved in a business transaction. As a result frequent adjustments are made in equities when transaction accounting principle would require that assets be adjusted.
2. Failure to recognize that every property transferred must combine asset and equity elements of exactly equal amount has led to the same type of confusion and the same type of results. Though this error in concept has been widespread, the practice has given incorrect results only when the property exchanged has involved an identified equity thus leaving the asset element unidentified. Such transactions have been erroneously classed as an exchange of an asset for an equity, and hence, the offsetting adjustment to equities to force a balance between the debits and credits by which such transactions have been recorded. Such an exchange is an impossibility since its only meaning is that the ownership of a thing is traded for the thing itself. In cases in which the asset has been the identified part of the property, the adjustment has been properly made through the net-worth equities for the difference between transaction price and the carrying amount. It is well also to point out that, in almost all cases, when the asset is identified the equity element of the property is unidentified and vice versa.
3. Largely as a result of the above two basic errors in accounting logic, current practice has apparently accepted, as fundamental accounting principle, the procedure that all adjustments essential to balance the debits and credits in any transaction must be made through net worth or some related account. It is only necessary to point out that under the procedure outlined in this article, the adjustment would be made to

assets when the asset element was the unidentified part of the property involved, whereas, it would be to net worth if the equity element were the unidentified part of the property.

4. It follows, therefore, that the result of the above errors in basic accounting logic has been the unconscious substitution of the bookkeeping rule of equal debits and credits for the accounting principle of equal assets and equities. It is true the bookkeeping rule leaves an equality between the supposed assets and equities, but, as demonstrated earlier, there may have been any number of forced changes in the carrying amounts of these assets and equities wholly unrelated to actually executed business transactions. Debits and credits are themselves a part of the accounting process and when they are made a basis of control, the result is to set up a self-contained entity, designed to control only itself, wholly removed from the actual flow of property in business transactions.

In conclusion, it is interesting to note the following summary of troublesome elements in accounting theory and practice which appear to be somewhat clarified and simplified when interpreted in terms of the transaction basis of accounting.

1. The transaction-flow-of-property basis gives accounting a stable point of view tied into a technical basis of accounting in such manner as to be positively distinguishable from other associated points of view.
2. It sets up an accounting fiction which sharply defines the limits of the function and scope of accountancy. This, together with the stable point of view, reduces the difficulty of separating the accounting from the nonaccounting elements of actually executed business transactions.
3. It shows the exact relationship between the fictitious accounting entity and the fictitious business entity irrespective of whether or not the latter has legal existence.
4. It makes possible the classification of

all business transactions in terms of their true effect upon the fictitious accounting entity.

5. It substitutes the accounting principle of measuring the true effect of the transaction flow of property upon the accounting assets and equities for the bookkeeping rule of equal debits and credits.
6. It brings both sides of the basic accounting equation under exactly similar rules of procedure. Thus, the carrying amount of every item, whether asset or equity, which passes from the dual accounting entity must be completely removed from the books of account. And in no case may the difference between this carrying amount and the transaction price be carried, as an adjustment, into another item on the same side of the basic accounting equation. The equality of assets to equities must be recognized in every executed business transaction and this equality reflected by corresponding equal increments and decrements within both elements of the fictitious accounting entity. Hence, differences between the carrying amounts of outgoing assets and the transaction price of incoming assets are adjusted for in the equities, while similar differences between equities are adjusted for in the assets.
7. It identifies the elements of profit and loss on both sides of the basic accounting equation.
8. It eliminates the possibility of profit or loss resulting from changes occurring on only one side of the basic accounting equation.
9. It provides an effective basis for distinguishing the technical accounting from the popular meanings attaching to the same term.
10. It reduces dissolution entries to the exact converse of organization entries.
11. It eliminates all amounts from the fictitious accounting entity which have not resulted from the effect of actually executed business transactions.
12. It defines an exact basis on which legal and accounting control may be combined in the balance sheet without conflict.

ECONOMIC ASPECTS OF FIXED-CAPITAL OBSOLESCENCE

C. A. MOYER

PRIOR TO the twentieth century economic literature devoted little attention to problems arising from the abandonment of producers' durable goods before the end of their physical life. When obsolescence was mentioned it was usually treated as a factor of depreciation that had hitherto been somewhat overlooked. However, the mere mentioning of obsolescence as one of the causes of depreciation was the first step leading to a much more detailed examination and refinement of the concept.

In recent years an attempt has been made in some instances definitely to separate depreciation and obsolescence. This tendency to separate these two sets of factors seems a logical and necessary one and is a separation which is recognized throughout this article. The term depreciation was at first used in the business world to describe only the loss of value suffered by durable goods because of "wear and tear" and physical deterioration. Since obsolescence is still excluded by many writers and many producers when

speaking of depreciation, but is included by others, it becomes necessary to establish a consistent treatment in this respect. Problems of physical depreciation have been studied for several decades, but an appreciation of the separate problems of obsolescence is just becoming apparent. In order to secure clearness of terminology, it is desirable that depreciation as used in the business world should retain its original meaning and not be broadened indiscriminately to include other factors such as obsolescence.

It is true that in business practice, separate measurement offers a difficult task; nevertheless, such a separation is desirable. Modern economic society is conducted largely with private capital and under private management, and stability therefore requires that sound financial policies be followed. If the interests of creditors, stockholders, and the public are to be protected, the full facts of depreciation and obsolescence must be clearly stated and understood. This separation is necessary in order that these groups be served to the best advantage, and should be maintained in business practice as well as in analytical studies.

The term depreciation is used herein to describe the physical factors which contribute to the retirement of fixed assets from use. In other words, it includes "wear and tear" from use, and deterioration from the action of the elements. Obsolescence is the word used to describe the functional or intangible factors which cause the permanent abandonment of fixed assets. When durable goods become obsolete, they go out of use before the end of their physical life because of changing economic or technical conditions. Stated concisely, depreciation is caused by the *use* of certain productive facilities in producing goods or services, while obsolescence leads to the *non-use* of certain productive facilities. The former implies the gradual ex-

piration or consumption of productive power, while the latter implies the *abandonment* of unused potential productive power.

It seems that no important cases which considered the subject of obsolescence had appeared in the courts before 1909. At that time, obsolescence was regarded as a risk which had no relationship with the calculation of net earnings. Since the case of the *Brooklyn Heights R. Co. v. State Board of Tax Commissioners*, in 1910, the courts have quite consistently upheld the view that the provision for depreciation should include an allowance for that obsolescence which is reasonably ascertainable in advance, while that which is not so readily ascertainable should be excluded.

The changing status of the subject in various income-tax laws since 1913 presents an interesting and significant evolution. It should be borne in mind, however, when examining the place of obsolescence in the income-tax law, that this law establishes rules of procedure to be used in computing income for tax purposes only. Before 1918, the Bureau of Internal Revenue permitted the cost of property lost through obsolescence to be deducted in the year in which the property was disposed of; taxpayers were not permitted to accrue obsolescence as they did physical depreciation. During the World War, the use of specialized machinery and equipment for manufacturing war supplies emphasized the importance of obsolescence to the individual taxpayer. Realizing that such equipment would be useless as soon as the War ended, the firms engaged in manufacturing war supplies began to insist that they be permitted to accrue obsolescence; that they be permitted to make deductions for obsolescence even before machinery and equipment were discarded.

The Act of 1918 distinguished between normal or ordinary obsolescence, "due to

the normal progress of the art or to becoming inadequate to the growing needs of the business," and extraordinary obsolescence, due to "some unforeseen cause by reason of which the property has been prematurely discarded." The Treasury Department permitted an annual deduction for the former when computing income for tax purposes, but permitted the latter to be deducted only in the year in which the property was discarded. Later acts further clarified and expanded upon these terms. Income-tax laws have retained the distinction between ordinary and extraordinary obsolescence, and this refinement has received widespread usage and acceptance.

Early accounting literature did not mention obsolescence. However, with the introduction and widespread use of accounting for depreciation, accountants began to mention obsolescence as one of the depreciation factors. In the early twentieth century it was considered as a risk of doing business and the accountants made no attempt to take it into consideration in the accounts until a fixed asset was definitely abandoned. However, as the technique of manufacturing and industry developed, more and more cases of obsolescence appeared. Accountants began to regard it as a regularly occurring phenomenon and so included it as a factor of depreciation.

Accountants also suggested that in many cases producers must use their judgment as to what they consider the best time to retire certain assets from use. Sometimes, of course, there is no option, but for many improvements and new techniques, the producer may exercise a choice of continuing the use of his present equipment or of substituting new. Obsolescence therefore may be classified as compulsory or volitional.

Obsolescence has also been classified by writers as complete or partial, tempo-

rary or permanent, product obsolescence or machine obsolescence, and primary or secondary.

A careful distinction should be made between obsolescence and obsoleteness. An asset is obsolescent while it is still in use but is approaching the point at which it will be discarded before the end of its physical life. It becomes obsolete when it is discarded because of obsolescence. Obsoleteness, then, is the final state of obsolescence, or is completed obsolescence.

The frequent occurrence of obsolescence has led to the question of whether or not it constitutes an expense of production to the individual producer. Private business has been slow to examine the financial effects of obsolescence, as it was also slow to examine the financial effects of physical depreciation. The physical effects of depreciation are clearly recognized by individual producers. They see that durable goods used in production finally become unsuitable for further production and have to be disposed of. They perceive also that fixed property, like less durable property, or circulating capital, is consumed in service. Although alike in their fundamental nature, the two are traditionally separated because the latter is consumed in a single use, while the consumption of the former extends over a longer period of time. The physical results of depreciation are apparent, but the same cannot be said of financial results.

If the life of the business and the life of the asset coincide, as was true in the case of the early joint ventures, or if the asset's physical life is less than the life of the enterprise and no attempt is made to compute earnings periodically, then the monetary value of an asset lost through use would automatically be considered as an expense of production, probably at the time of abandonment. However, present industrial society requires that profits be measured at frequent intervals in terms of monetary units, and so it has

become necessary that the life of an enterprise be divided into arbitrary periods of time. In order to allocate the expense occasioned by the use of fixed assets, several methods of apportionment have been devised and applied in business practice.

The financing of replacements is an important problem to management and is one which must be faced, but it is a problem apart from that of consideration of depreciation as an expense of production. The question of methods of apportionment, use of original cost or replacement cost, effects of changing price levels, and similar questions are receiving considerable attention today. The significant point about depreciation today is the fact that the details of depreciation are receiving notice, and not the question of whether or not it constitutes an expense of production. It has been quite widely accepted in the courts, in literature, and in business theory and practice as an expense of production.

Obsolescence, on the other hand, was not until recent years considered to be an important part of the problem of the measurement of the financial results of the use of fixed property in industry. Engineers state that in most cases obsolescence causes the abandonment of physical property long before it has reached the state of physical deterioration which would cause discontinuance of its use. The question arises therefore as to whether or not obsolescence as well as physical depreciation should be considered as an expense.

Obsolescence has been treated in a number of different ways in business practice. Very frequently in the case of railroads and public utilities, obsolescence has been disregarded as a factor in calculations of profits, and physical depreciation has been charged on equipment as long as it is still owned, even though the equipment has been taken from use. It has sometimes been advocated that obsolescence should be capitalized; that the unamortized cost

of the old property should be added to the cost of the new property taking its place so that the total will be apportioned over future periods. The Interstate Commerce Commission has permitted the railways, in some cases, to treat the loss resulting from obsolescence as an asset or deferred charge of a special nature, to be allocated to future periods' operations. Obsolescence suffered has sometimes been considered as a deduction from revenue in the year in which the property was abandoned. A fifth treatment often advocated and often used in practice is to reduce accumulated surplus of past periods by the amount of the obsolescence which has occurred. A reserve for contingencies has often been maintained in order to restrict assets withdrawable by dividends when it appears that obsolescence might occur in the future. The income-tax provisions permit normal obsolescence to be combined with depreciation and deducted in computing income for tax purposes. Extraordinary obsolescence, which has not been accrued, is considered as a loss of the year of abandonment and may be deducted from the year's income in computing the tax. Recent court cases, however, have held that if obsolescence not provided for in the depreciation allowance is foreseen, then the depreciation deduction permitted in the following years of the use of the asset may be increased in order to include the additional amount foreseen.

Objections to including obsolescence as a periodic deduction from revenue have been based mainly upon the argument that it is an unpredictable factor. The same objection was raised when discussions of physical depreciation as an expense of production first began to appear; but, the desirability and necessity of attempting to measure the consumption of physical property has brought about the acceptance of physical depreciation as an expense in spite of the fact that attempted measurements are only reasonably accu-

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rate estimates. The same practical difficulty has delayed the recognition of obsolescence as an expired outlay which is to be considered in the periodic calculations of profits.

It may be granted that obsolescence is not exactly predictable, but it is believed that it is not as unpredictable as commonly believed. Studies have shown that an average lapse of thirty-three years was found to exist between the "conception date" of an invention and "the date of commercial success."¹ The development period which is necessary after every invention tends to make obsolescence predictable. The construction of mortality tables for various types of physical property, improvement of forecasting techniques, and further engineering developments will all lead to greater accuracy in predicting this factor. If it is granted that much obsolescence is reasonably predictable, then obsolescence represents an expired outlay which should be taken into consideration in calculating earnings periodically.

Management should determine the expense caused by accruing obsolescence as accurately as possible and should record this periodically. As the time of retirement approaches, and its date becomes more accurately determinable, then surplus or accumulated earnings should be corrected for over- or under-allowances of the past, and future allowances should be based upon the new estimates. As the technique of forecasting develops, the periodic obsolescence expense to be shown can be estimated more accurately.

In the broad economic sense, obsolescence is considered as an expense of production, but if management desires to introduce an accounting refinement and consider obsolescence as a loss, rather than as an expense, because the abandoned capac-

ity contributes nothing to production, then the accounting treatment will be slightly changed. Obsolescence then will be treated as a regularly occurring loss which must be taken into account before arriving at a net revenue figure, but not as a cost of production along with depreciation. Whether it is considered by management as a cost of production or as a loss which occurs regularly, the ultimate financial results of either provision will be the same, for both treatments cause a deduction to be made from gross revenue.

Not only should individual concerns consider obsolescence in their periodic calculations of net earnings, but they must also provide through the establishment of funds or the maintenance of a favorable working capital position, for the financing of new equipment when it is needed. The recording of obsolescence as an expense would tend to give a correct calculation of profits, but it would not guarantee that the assets derived from sales would be kept in such form that replacements could be financed from them.

Another problem which has arisen with respect to individual enterprises is in connection with the time when fixed assets should be retired because of volitional obsolescence. The conclusion is reached that every concern should retain the old assets until it appears that the advantages to be derived from the use of the new equipment ultimately will yield the concern a larger net revenue than that derived if the old equipment is kept in use. The comparative effects upon the income stream must be estimated. In making this estimate, management must include in its consideration many things which apparently are frequently overlooked. The abandoned usefulness of existing property, the savings in operating costs to be effected, and the possibility of future obsolescence of the new equipment are factors which should receive attention in making the comparison. The probable rate of production

¹ Gilfillan, F. C., "The Prediction of Inventions," *Technological Trends and National Policy*, National Resources Committee (Washington: 1937) p. 19.

should be projected into the future. Although equipment is purchased which has twice the capacity of the old and will give a lower unit cost of production when used to full capacity, it does not necessarily follow that the purchase of such equipment is desirable. Increased capacity with lower costs does not cause any savings unless the excess production can be disposed of in the market. Many examples of overexpansion are evident in which new equipment was purchased or a new plant was built for future business which never materialized. Sales cannot be increased merely by spending money on improved methods which will give greater output. Also, rates of interest and means of financing, and the effects of changes of quality upon the sales price and the extent of the market for the improved product, are matters which must be given due weight before entering upon a contemplated change.

Consideration of the above factors is necessary in order that each producer will insure himself the most profitable use of improvements and the avoidance of imprudent obsolescence retirements. Many of these factors are difficult to express in terms of effects upon future revenue; nevertheless, they should be fully considered.

The temporary advantage secured by the installation of a new technique has sometimes been mentioned in connection with a retirement policy. If everyone adopted the new technique immediately, prices would soon drop and no special gain would result. However, the initiator who installs the new technique first and withholds the profits from the community as a whole secures a temporary advantage because of the lag existing before competitors adopt the same methods and before prices are lowered generally.

It is true that the producers who begin business with machinery which can pro-

duce at lower costs, and the producers who have machinery which has been in use for some time and is ready to be scrapped anyway, and who therefore are in a position to use a newer type than competitors, will enjoy a temporary advantage over their competitors. Those producers who can operate at lower costs than the marginal producers derive an additional gain or saving which is in the nature of an economic rent. The above description is not a criterion of retirement, but serves as an analysis of one reason why certain enterprises may be able to earn profits in excess of others in the same field.

It seems reasonable to believe that capital goods which are obsolete to one concern are not necessarily obsolete to another concern. An enterprise which has installed new machinery just before a technological improvement appears will probably find that it would not pay to scrap this machinery soon, even though an improved type made its appearance and was adopted by some competitors. High labor costs in one community may also be an influence which will accelerate retirements because of obsolescence earlier there than in other parts of the country where labor costs are lower. Not only each individual industry, but also each individual concern should analyze the advantages of the new as compared to the old in reaching a decision on obsolescence. Furthermore, the conditions peculiar to each type of durable goods or to each method involving the use of durable goods must be analyzed in order to determine the most advantageous time of retirement.

Commission-regulated industries, like private industries, should compute the differential net revenue obtained from the use of new equipment as compared with the use of the old. But they should also judge the effect of the probable attitude of commissions when contemplating retirements because of obsolescence.

The time at which a cost-reducing innovation is installed also has a direct effect upon consumers. From the viewpoint of the consumer it would seem that the sooner these improvements were universally adopted, the greater would be his gain. If all producers adopted a cost-reducing innovation at once, then it seems to follow that the consumer would enjoy its benefits more rapidly because lowered costs and competition would bring lower prices. Lower prices will follow if competitive conditions are still present, for those initiators who introduce the new method and who derive quasi-rent will find that a new margin will be established with a more widespread adoption of the new method, and the quasi-rent will tend to disappear.

It should be kept in mind that immediate widespread adoption of improvements would increase total costs because of the shortened life of fixed property. Such a condition would tend to keep costs high rather than to lower them. An extremely rapid rate of retirement therefore might work to the disadvantage of consumers.

Many complications appear when an attempt is made to determine the time at which fixed property should be declared obsolete in order that the best interests of labor will be served. The immediate effects upon labor of technical advances or improved methods is the direct displacement of labor. Many if not most of the new machines require less labor to operate and therefore directly displace workers from their jobs. A technological improvement may also result in indirect displacement of workers in many ways. It is impossible to trace the direct or indirect effects upon labor all the way through industry and society, but many cases can be found in which a technological advance in one industry has an effect upon another industry which appears at first to be only distantly related.

It is generally believed that the introduction of labor-saving machinery and technological advances in industry leads in the long run to a higher standard of living for labor. It is believed that ultimately labor benefits a great deal by these improvements. As labor-saving machinery is introduced, manufacturing costs are reduced and eventually the price of the product falls. As a result, the product is made available to consumers at a lower price and more of it is consumed. The new machinery which is required calls for additional workers in the durable goods factories and in the extractive industries and in other related industries. It is also true that the increased consumption of the product will presently require a gradually increasing labor force in order to increase production to a higher level. Shorter working hours, more pleasant working conditions, and lighter tasks are mentioned as some of the favorable results of technological advances.

Discussions of technological unemployment often overlook one important aspect however. In the United States we have a continually increasing population, and also an increasing labor productivity because of technological improvements. Therefore the rate of production must increase rapidly enough to take care of the increase in the working population and also to offset the increased productivity.

If labor is to be given fullest consideration, a technical improvement should not be installed until the labor displaced by such an improvement can be absorbed by other departments or by other industries or can be given temporary work of some sort until permanent employment can be found. Also, substitutions of improved equipment for old should not be made so rapidly that the requirement for more labor due to increase in total production is not able to absorb both the recently released workers and the increasing labor

supply accompanying an increasing population.

The conclusion seems to follow that the time at which fixed property should be retired because of obsolescence does not coincide for all interests concerned. The most advantageous time for owners may not prove to be best for consumers or for labor. On the other hand, if fixed property is declared obsolete so that the consuming class benefits most, owners and labor may suffer injurious results. The rate of retirement which would be most beneficial to labor may prove to be very disadvantageous to other groups. The most advantageous time for one owner may be quite different from that of another owner of identical equipment. The consumers of one product may benefit from certain retirements which will result in injury to other consumers. Labor in a specific concern or industry may experience injurious results because new equipment is substituted for old, while labor in other concerns or other industries may be greatly benefited by such changes.

The rate of retirement which will give the best social results is indeed a problem. But a general statement may perhaps be attempted. If no new machinery is permitted except for replacement of units worn out, there would be no recognition of obsolescence, but under this plan progress in technology would be retarded and the productive efficiency of such an economic system would be low. If improved methods and improved machinery are universally installed as soon as they are available, then obsolescence costs will be high and considerable effort and expense will be necessary in installing the new equipment in place of the old. In this case progress in technology would be rapid because the latest methods would be used as soon as possible, and again efficiency would be low because obsolescence costs would be extremely high. The most

desirable results would follow from a policy of obsolescence retirements which lies somewhere between these two extremes.

It is difficult to arrive at a specific conclusion as to the proper time to declare a property obsolete in order that society may be served to best advantage. The interests of labor, and of the owner of property, and of the consumer would all have to be thoroughly studied. Also the direct and indirect effects of any particular case of obsolescence would have to be predicted. The waste of abandoned capacity, if there be such a waste, would have to be taken into account. The advantages of large-scale production would have to be considered because the rate of retirement for those industries which operate best in large units might be different than the rate which should exist in small industries. These and many other factors would have to be thoroughly considered if retirements because of obsolescence are to be made in the public interest.

Since the various groups involved have diverse interests in the matter, and since the social viewpoint would require a balancing of all these diverse interests and of indirect effects as well, the question arises as to how retirements because of obsolescence have been controlled and how they should be controlled.

The chief incentive for modernization is accounted for by the profit motive. In the earlier days of industrial developments wide markets were available, new concerns and new industries were springing up rapidly and therefore improvements were accepted quickly by established concerns in order to compete with new firms. Under conditions such as these, retirements of fixed property because of obsolescence tend to occur frequently. As industrial activity becomes more stabilized and as the rate of expansion diminishes there is a tendency for the rate of pre-

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mature retirements also to decrease. Large corporations with immense investments in durable goods are naturally reluctant to scrap existing equipment before it is worn out physically.

The increased mechanization of industry has led to an increase in overhead costs and a decrease in variable costs and therefore has tended to make business costs increasingly inflexible. It is natural under these conditions that producers should try to forestall retirements because of obsolescence by attempting to prevent certain producers who were in a better position to make changes from making them earlier than those producers in a less favorable position.

Two monopolistic devices have been used in this connection, namely, the suppression of patents and the pooling of patents. If a patent appears which an individual concern does not wish to use at the present time because much of its existing equipment would have to be scrapped, then the concern may be able to delay the introduction of the improvement by securing control of the patent, and suppressing it. If a concern is not in a position to scrap existing equipment and wishes to protect the stockholders' investments, it may try to keep competitors from using any innovations which will reduce competitors' costs. This action may add an element of rigidity to current price levels.

Patent pools and cross-licensing agreements have been formed in many important fields and may contribute to monopolistic control of specific fields. Large corporations which control these pools may choose to use the patents which they hold, or they may choose to withhold them until it is convenient to introduce them. Any independent who seeks to compete finds that most, if not all, of the basic patents are controlled by several large organizations from whom they must secure licenses

or permits before they may use such patents in their own operations. These monopolies are able to regulate obsolescence retirements to suit their own interests and therefore are quite likely to delay such retirements, in case cost-reducing innovations are available, until the point has been reached which will be most advantageous to them in their quest of profits. On the other hand, the pooling of patents might conceivably accelerate retirements because of obsolescence if the basic patents of an industry are made available to an entire industry. This has been characteristic of automobile manufacturing.

It is often claimed that the laboratory and research staffs maintained by large corporations furnish them with greater control over the obsolescence factor, for any inventions developed can be introduced or withheld at the discretion of the concern conducting the research.

Financial conditions and the money markets also exert an influence, for the necessary funds for modernization are sometimes difficult to secure. It may appear desirable to modernize a plant, but prove impossible because the necessary funds cannot be secured. The inability to finance improvements may thus prevent the withdrawal of equipment from use because of obsolescence. On the other hand, during periods of peak business activity, over-optimism of producers and those financially interested may lead to unwarranted modernization and thus to unwise obsolescence retirements.

Labor, too, has exercised indirectly some measure of control over obsolescence. In earlier times, workers often resorted to sabotage in order to prevent technological changes which might make their skills worthless. In recent years, organized bargaining has been substituted when it appeared likely that workers would be affected by discarding of existing methods

in favor of new ones. However, entrepreneurs have often used technical innovations to curb the power and requests of labor, and have in fact sometimes discarded equipment in favor of new units at an earlier time than they would have otherwise done had it not been for the wage demands of labor. Thus labor, while attempting to protect its own interests, has in some cases hastened retirements and in some cases delayed them.

The tendency of consumers to resist the new and to continue to use the familiar things forces producers to hesitate to introduce sudden and wide departures from things already in use, yet on the other hand consumers' tastes or preferences may force producers to discard existing property even though an attempt is made by the latter to forestall retirements because of obsolescence. The elasticity of demand is always a most important consideration when an improved product or a decrease in price is contemplated.

Legal and political forces also have considerable influence upon retirements of fixed property because of obsolescence. The influence of patent laws was mentioned above. Vested interests have attempted through legislation and lobbies to prevent compulsory obsolescence in their own fields or to force compulsory obsolescence upon their competitors. Compulsory installations of safety devices by law have long been fought by manufacturers because of the obsolescence which would accompany such installations. The Reconstruction Finance Corporation permitted many industrial concerns which were financially embarrassed to modernize their plants and probably thus prevented the failure of many concerns. The short-lived N.R.A. took definite steps to control the rate of modernization and therefore the extent of completed obsolescence. However, it is commonly believed that the

N.R.A. by compelling the payment of higher wage scales accelerated the use of new machinery and the abandonment of the old. Many manufacturers found that because of high labor costs, it would be to their advantage to scrap existing equipment and install new machinery which required less labor. It may be that the National Labor Relations Board will have a similar temporary effect, for if the increasing power of labor unions results in higher wages, corporations may find it to their advantage to install labor saving machinery more rapidly.

Under the modern "corporate system" consumers, workers, owners, and legal and political forces, exercise some influence over the time at which obsolescence retirements take place, but in general it is the decisions of management made voluntarily after considering these other influences that ultimately determine the course to be followed.

We are led to the conclusion then that obsolescence is not only a business cost but also that it is a social cost; that it is not only important to the individual entrepreneur, but also that it has far-reaching social implications. Some suggested solutions to the problems thus raised are mentioned below.

There is reason to believe that private business can do much to alleviate the harmful effects of obsolescence. The growth and development of the corporate system has been accompanied by a marked separation of management and ownership with most of the elements of immediate control resting in the hands of management. It has been contended that the owners of the securities of corporations have surrendered control over the corporations' assets and that therefore management should recognize the social implications of its control and should consider its responsibility one of trusteeship for investors, consumers, and workers. The

acceptance of this responsibility and a conscious attempt to serve the public interest in decisions made concerning obsolescence would no doubt result in more socially desirable policies than those followed at present.

The maintenance of more complete records by industry and the collection of data which will enable a more accurate forecasting of obsolescence should result in improved managerial treatment of this factor. A proper reflection of the financial results of obsolescence in the accounts and records should give a more accurate portrayal of operating results. Proper treatment of obsolescence by corporations generally should result in greater business stability and therefore help to minimize economic disturbances which accompany business failures.

Producers should appreciate the many factors involved when considering the contemplated retirement of existing obsolescent equipment in favor of new. Avoidance of injudicious obsolescence will permit corporations and industry to operate with greater social efficiency.

Employers have in a few cases made efforts to take care of the technological displacement of labor which usually accompanies obsolescence. Such employers have trained the workers displaced in new occupations, and have found the plan successful.

It appears that public utilities have often been shortsighted in their view of obsolescence. Commissions have repeatedly urged that utilities modernize their plants and thus increase their earning power. It is commonly believed that many utility companies have forestalled the adoption of innovations as long as possible believing that they benefited by doing so, and have thus withheld benefits which might be available to consumers.

Because of the many social implications involved, it is sometimes suggested that

the matter of obsolescence should not be decided entirely by private business, but that public policy and regulation should take a more active part when necessary. A thorough investigation and study of the individual and social implications and an attempt to understand some of the repercussions of obsolescence by a well-balanced group of individuals with broad vision undoubtedly would lead to greater realization of the social problems involved; and complete realization of these problems might point the way toward suitable solutions.

There has been considerable agitation in recent years toward a change in the patent laws. It is claimed that modern economic conditions require several modifications of present laws in order to prevent the misuse of patent rights. Some of the changes suggested are: the compulsory recording of patent assignments and cross-licensing agreements in order to protect the public from monopoly and unfair competition; the requirement that a patent must be used or it will be available to anyone, thus preventing the suppression of patents purchased and withheld in order to prevent competition; and an organized effort on the part of some government commission to establish cross-licensing agreements in industries which will permit the use of certain patents by the entire industry instead of by one company. These suggestions, if carried out, probably would tend to increase the extent of obsolescence.

It is unquestionably true that the existence of extensive equipment which would have to be declared obsolete with the introduction of better industrial techniques has been one of the important factors which has led to the attempted establishment of industrial monopolies. These monopolies have tried arbitrarily to regulate obsolescence in their plants in order to protect their own interests, and

as a result the public interest has often been neglected. A more effective control of these monopolies might lead to sounder obsolescence policies.

An attempt has been made by the writer to explore some of the problems that arise when obsolescence appears in our economic system. Because of the increased use of durable goods in industry and because of the rapid technical developments being made, the subject is assuming greater and greater significance to private

industry and to society as a whole. Because of its great importance to the individual concern and because of the social implications of obsolescence, it seems reasonable to believe that entrepreneurs will devote increasing attention to certain aspects of the subject; and it may be that government investigation, supervision, and control will be extended with a view to establishing standards in those fields in which such supervision appears necessary in order to protect the public interest.

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PROFESSIONAL EXAMINATIONS

A Department for Students of Accounting

HENRY T. CHAMBERLAIN

THE FOLLOWING problems were prepared by the Board of Examiners of the American Institute of Accountants and were presented as the second part of the May, 1939, C.P.A. examination in accounting theory and practice. The candidates were required to solve all problems in six hours. The weights given to the various problems were: problem 1, 10 points; problem 2, 15 points; problem 3, 35 points; problem 4, 40 points.

No. 1

An investment trust, whose stock is listed on the New York Stock Exchange, has requested an opinion concerning the proper record of dividends received or receivable as follows:

(1) 1,000 shares of common stock of X Manufacturing were received as a dividend on an investment in common stock of Y Corporation. The value of the shares at time of receipt, based on stock-market quotation, was \$100,000. The shares were carried on the books of the paying corporation at a cost of \$50 per share and the dividend was charged to surplus at that cost.

(2) The trust owns 1,000 shares of preferred stock and 500 shares of common stock of A Corporation and has received

as a preferred dividend 100 additional shares of common stock of A Corporation.

(3) A dividend is receivable on a common-stock investment payable at the option of the shareholder in cash or in preferred stock of the paying company, similar preferred stock being outstanding and listed on the stock exchange. The trust has decided to take stock.

Give your opinion how in each instance the receipt of the above dividends should be recorded.

NOTE.—Investment trusts, when listing their stock on the New York Stock Exchange, agree with the exchange as follows:

"Not itself, and not to permit any subsidiary, directly or indirectly controlled, to take up as income stock dividends received at an amount greater than that charged against earnings, earned surplus or both of them by the issuing company in relation thereto."

No. 2

On July 1, 1937, the merchandise inventory of the glove department of a department store aggregated \$90,600 at retail and \$54,360 at cost. During the following six months the purchases and sales were as follows:

Month	
July...	
August...	
September...	
October...	
November...	
December...	

	Purchases			
	Cost	Retail	Original	Net
		Price	Mark-up	Sales
July...	\$ 24,300	\$ 40,200	\$ 15,900	\$ 24,900
August...	31,500	55,800	24,300	30,500
September...	43,000	75,900	32,900	38,200
October...	35,200	60,000	24,800	55,300
November...	17,300	30,300	13,000	58,700
December...	9,500	15,700	6,200	60,900
	<u>\$160,800</u>	<u>\$277,900</u>	<u>\$117,100</u>	<u>\$268,500</u>

During these six months the following reductions were made in the retail price:

1. To facilitate disposal of over stock.....	\$ 4,000
2. In connection with odd lots.....	2,500
3. To meet competitive prices.....	3,000
4. Miscellaneous.....	2,000
Together.....	<u><u>\$11,500</u></u>

In addition to the above mark-downs, the selling price of certain merchandise was reduced in connection with a special store-wide sale held annually in October of each year. For the duration of the sale, the selling price of a lot of merchandise consisting of 300 dozen pair of a nationally advertised brand of gloves was reduced from \$5.00 per pair of \$4.25 per pair. At the conclusion of the special sales period it was found that 26 dozen pair remained unsold and the selling price thereof was restored to \$5.00 per pair.

During the season the selling price of a special lot of imported gloves which proved to be unusually popular was increased from the original selling price of \$6.00 per pair to \$7.50 per pair. This additional mark-up applied to 500 dozen pair of gloves. Later in the season the additional mark-up of \$1.50 was canceled on 75 dozen pair of gloves of a certain color which were not moving as fast as the remainder of the line and the price reduced to the original price of \$6.00 per pair.

A physical inventory taken at the close of business December 31, 1937, aggregated \$94,500 at retail. The physical inventory at retail was found to be unusually close to the book inventory and did not show the normal expected shrinkage. Investigation revealed that a lot of 50 dozen pair of gloves received in the last few days of the year had not been included in the purchases recorded in the stock records because the invoice had not been received until after the close of the year. This lot of 50 dozen pair of gloves was purchased at a cost of \$3.75 per pair and marked to sell at \$6.00 per pair. Some of the gloves

included in this lot had been sold before the close of the year and were not included in the inventory.

From the above information compute by use of the retail inventory method:

- The amount of the stock shortage at retail.
- The value at which the closing inventory of the glove department should be carried on the balance-sheet.
- The cost of sales for the six months ended December 31, 1937.

In the solution carry percentages to 2 decimal places.

No. 3

Company A and Company B are engaged in the production and sale of crude oil. On January 1, 1938, Company A acquired from Company B a twenty years' leasehold on a certain undeveloped property on the following terms:

- Of the oil produced, $12\frac{1}{2}\%$ is to be delivered to Company B as royalty.
- On the remaining $87\frac{1}{2}\%$ Company A is to pay Company B 25 cents per barrel until the total so paid has aggregated \$700,000. The latter sum is understood to be the purchase price of the lease and must be paid unless the geologists' estimate of the total oil underground capable of being produced is less than 3,200,000 barrels. In that event the purchase price will be proportionately reduced.
- To ensure development of the property, Company A is to keep one string of drilling tools in continuous operation until January 1, 1948, or pay a penalty to Company B for idle periods, calcul-

lated on the basis of \$50,000 for a whole year's cessation of drilling operations.

4. Company A is to pay the land rentals which amount to \$75,000 per annum payable in advance and are due on January 1 of each year.
5. Company A may discontinue development and abandon the leasehold at the end of ten years, upon which any unpaid balance of the purchase price of the lease will become due and the property, with all its development and equipment, reverts to Company B.

During 1938 Company A drilled continuously and expended \$630,000 for drilling, construction of field lines, and other work in the field, and produced 648,000 barrels of oil, which were all sold or delivered within the year. Company A realized an average of \$1 per barrel on the sales of crude oil and all costs of producing and handling amounted to 40 cents per barrel on its own share of the oil produced, before depletion and land rentals.

It was agreed by the geologists of both companies that on January 1, 1938, the oil underground capable of being produced from the wells existing on December 31, 1938, aggregated 2,400,000 gross barrels and that it will require ten years to produce it.

They also estimated that on January 1, 1938, the total oil reserves in the property amounted to 8,000,000 gross barrels and that, with an expenditure of \$1,600,000 for additional wells and facilities, this oil can be produced during the life of the lease. The latter sum includes the estimated cost of keeping one string of drilling tools in continuous operation.

Company A, having in the meantime acquired other properties which produce crude oil of higher quality at lower cost, sought to revise the agreement. Company B offered to reduce, commencing January 1, 1939, the penalty for failure to

continue drilling operations to \$10,000 per annum, to operate the property using the existing wells and facilities, or any additional wells and facilities, to keep them in good operating condition, and to deliver to Company A its share of the crude oil for 35 cents per barrel. In other respects the terms of the contract were to remain the same.

Company A will charge depletion on the basis of actual exhaustion of the estimated oil reserves, without regard to the discovery value—and percentage depletion clauses in the federal income-tax law.

- (a) What entries should be made by Company A on January 1, 1938?
- (b) What is the gross profit or loss of Company A on the crude oil produced and sold in 1938?
- (c) Which of the following alternatives will be the most advantageous to Company A, assuming that operating costs and sales prices remain the same, and that the wells and equipment have no salvage value:
 1. Not to accept Company B's offer and to continue production and development.
 2. Not to accept Company B's offer and to continue production, but to discontinue development.
 3. Not to accept Company B's offer and to discontinue production as well as development.
 4. To accept Company B's offer and to continue development.
 5. To accept Company B's offer and to discontinue development.

No. 4

On January 2, 1938, Brown and Black jointly bought from Smith certain real estate on which two buildings had been erected. One of the buildings occupied two-thirds and the other the remaining one-third to the property.

The purchase price was \$150,000 for the entire property, the seller (Smith) agreeing to pay off a \$120,000 four-percent mortgage and other encumbrances attaching to the property. These encumbrances consisted of unpaid taxes for 1935, 1936, and 1937, that had become liens on the property on December 31 of each year. They were by mutual agreement accepted as being respectively \$6,400, \$5,700, and \$5,700. Smith also agreed to bear the expenses incident to title search and guaranty.

Brown advanced \$1,000 to bind the contract, and agreed to close the deal on February 15, 1938. He also agreed that the other expenses incident to the purchase and closing should be paid by Brown and Black.

On the same day, January 2, 1938, the two-thirds of the property was sold to Jones for \$109,000 cash. Jones was to receive the net income from the property from that date on and to receive a clear title on February 15, 1938.

and since January 1, 1937, the mortgagee had operated the property.

To finance the above deals, insure proper payment of encumbrances, and make final cash settlements, Brown and Black designated the Y Trust Company as their depository and agent in the foregoing purchases and sales.

The Y Trust Company agreed to receive in escrow the \$109,000 paid by Jones and to take a \$42,000 four-per-cent mortgage on the remaining third of the property on February 15, 1938. From the \$151,000 thus available the trust company was to pay off the \$120,000 mortgage and settle with the X Insurance Company on the latter date. The trust company was also to pay or make provision for the encumbrances, attend to the transfer of title, and make final settlement with the other parties to the aforementioned sale and purchase transactions.

On February 15, 1938, the trust company had complied with all the foregoing terms and rendered the following accounting to Brown and Black:

Receipts

From Jones—for the two-thirds of the property sold Jan. 2, 1938.....	\$109,000
From Y Trust Company—for mortgage on the remaining third.....	42,000
	<hr/>

\$151,000

Disbursements

Revenue stamps.....	\$ 150
Traveling expenses.....	128
Telephone and telegrams.....	52
Title search.....	1,364
Title guaranty policy.....	400
90% of 1935 and 1936 taxes.....	10,890
Held in escrow for balance of taxes.....	6,910
Jones.....	2,940
Smith.....	23,840
X Insurance Company—per account rendered.....	101,786
Brown and Black.....	2,540
	<hr/>
	\$151,000
	<hr/>

The above mortgage of \$120,000 was held by the X Insurance Company. Interest had been paid to September 1, 1936,

The account rendered by the X Insurance Company was submitted with the above settlement, viz:

Amount of mortgage.....				\$120,000
Interest from Sept. 1, 1936, to Dec. 31, 1937.....				6,400
Interest from Jan. 1, 1938, to Feb. 15, 1938.....				600
				<hr/>
Less—Balance of operating income				\$127,000
Rental income to Feb. 28, 1938.....		1937	1938	
		\$32,400	\$5,400	
Deduct—Operating expenses				
Heat, light and power.....		\$ 2,400	\$ 400	
Maintenance and repairs.....		4,300	250	
Salaries and wages.....		3,600	124	
Management fee—4%.....		1,296	216	
		<hr/>	<hr/>	
		\$11,596	\$ 990	
		<hr/>	<hr/>	
		\$20,804	\$4,410	25,214
		<hr/>	<hr/>	<hr/>
Balance payable.....				\$101,786
		<hr/>	<hr/>	<hr/>

The transactions in the remainder of the year 1938 were as follows:

All rents, amounting to \$9,000 were collected.

All operating expenses were paid to the amount of \$2,700.

Semi-annual interest was paid on the mortgage when due.

The 1937 taxes were paid in the amount of \$6,000.

The 1935 and 1936 taxes were settled at a reduction of 9%.

Alterations costing \$2,500 were made for a new tenant who took a five-year lease, beginning July 1, at the rate of \$125 per month.

The new tenant deposited \$1,000 to secure the lease, applicable as rent for the last eight months of the term.

Black drew \$100 per month management salary from February 15, 1938.

On December 31, 1938, the remaining third of the property was sold for \$52,000 cash, Brown and Black assuming all encumbrances, including the 1938 taxes, which had accrued at the 1937 rate, and depositing their amount with the Y Trust Co.

From the foregoing data prepare the following accounts of Brown and Black:

1. A statement of profit and loss showing separately the profit or loss on the sale and on the operation of the property.
2. A statement of receipts and disbursements, also showing the final distribution of cash to the two partners.

Submit any necessary work sheets.

Solution to Problem 1

1. The dividend should be taken on the books of the investment trust at \$50,000.00, in accordance with its agreement with the New York Stock Exchange. The receipt of a dividend, thus recorded, is not permitted to change a profit which was unrealized in the hands of the paying corporation to a realized one in the hands of the shareholders of the receiving corporation. If the paying company is a subsidiary and the dividend represents a distribution of surplus earned subsequent to the date of acquisition, the entry would be a debit to the investment in X Manufacturing and a credit to income from dividends; if all, or a part, of the dividend was a distribution of surplus earned prior to the date of acquisition, then to that extent the credit should be to the investment in Y Corporation.

For Federal-income-tax purposes dividends received in property other than money are to be included in gross income at the fair market value of the property received (\$100,000, provided the quotation represented a fair market price of as many as 1,000 shares).

2. The same rule should be followed upon the receipt of common stock as a dividend on preferred: charge investment in common stock and credit dividends received with the proper proportion of the amount transferred by the paying corporation from earned surplus to common-capital-stock account.

3. The same procedure should be followed as in 2, above.

The dividends received under 2 and 3 are subject to the Federal income tax.

Solution to Problem 2

(A) The amount of the stock shortage at retail:

Inventory, July 1, 1937, at retail.....	\$ 90,600.00
Add purchases (per books) at retail.....	277,900.00
 Total.....	 <u>\$368,500.00</u>
Deduct—Mark-downs	
Permanent reductions.....	\$ 11,500.00
For sale—300 dozen pairs @ \$.75 per pair.....	\$2,700.00
Add restored price 26 dozen pairs.....	234.00
	2,466.00
	<u>\$ 13,966.00</u>
Less—Mark-up	
On 500 dozen pairs @ \$1.50 per pair.....	\$9,000.00
Mark-up cancelled—75 dozen pairs.....	1,350.00
	7,650.00
	<u>6,316.00</u>
 Sales.....	 <u>\$362,184.00</u>
Inventory per books at retail.....	\$93,684.00
Purchase of gloves not recorded—at retail.....	3,600.00
Correct inventory at retail.....	<u>\$97,284.00</u>
Physical inventory.....	94,500.00
Inventory shortage at retail.....	<u>\$ 2,784.00</u>

(B) The value at which the inventory should be shown in the balance sheet:

	Sale Price	Cost
Inventory, July 1, 1937.....	\$ 90,600.00	\$ 54,360.00
Goods purchased, July 1 to December 31, as recorded.....	277,900.00	160,800.00
Goods purchased but not recorded.....	3,600.00	2,250.00
Mark-up (425 dozen pairs @ \$1.50 per pair).....	7,650.00	
 Total.....	 <u>\$379,750.00</u>	 <u>\$217,410.00</u>
	100%	57.25%
Physical inventory.....	<u>\$94,500.00</u>	
Balance sheet inventory value.....		<u>\$54,101.25</u>

(C) Cost of sales:

Cost of inventory, July 1, 1937.....	\$54,360.00
Cost of goods purchased, July 1, to December 31, 1937, as recorded.....	160,800.00
Cost of goods purchased but not recorded.....	2,250.00
 Total.....	 <u>\$217,410.00</u>
Less inventory, December 31, 1937.....	<u>54,101.25</u>
Cost of sales (including inventory shortage).....	<u>\$163,308.75</u>

The inventory shortage included in the cost of sales is \$1,593.84 (57.25% of \$2,784.00).

COMMENTS

The retail method of inventory attempts to arrive at an inventory figure which is cost or something less than cost. If there have been no declines in the retail prices, the inventory figure determined by the retail method is supposed to approximate the cost of the inventory. If the retail value of any part of the stock has declined, then the use of the retail method is

supposed to produce an inventory figure which is less than cost, or as some of the advocates of the method say, a figure which approximates the lower of cost or market.

In figuring the percentage of cost to retail value under the retail method mark-ups should be added to the original selling price but mark-downs should not be deducted. Reductions in the retail

price which are cancellations of previous mark-ups are not regarded as mark-downs but, rather, are treated as mark-up cancellations (75 dozen pairs of gloves at \$1.50 per pair). Likewise, increases in the retail price following such things as re-

ductions for sale purposes are treated as mark-down cancellations and not as mark-ups (26 dozen pairs of gloves at \$.75 per pair).

The retail method is now acceptable for federal tax purposes.

Solution to Problem 3

(a)	January 1, 1938				
Cost of oil rights.....	\$ 700,000.00				
Due to Company B.....		\$700,000.00			
To record cost of lease.....					
Land rental.....	\$ 75,000.00	\$ 75,000.00			
Cash.....					
To record payment of land rental for the year, 1938.					
(b) The costs incurred in 1938 were as follows:					
Cost of oil rights (8,000,000 barrels)	\$ 210,000.00				
Developed area—30% (2,400,000 barrels)	490,000.00	\$700,000.00			
Undeveloped area—70% (5,600,000 barrels)					
Land rental.....		75,000.00			
Drilling and field work.....		630,000.00			
Costs of producing and handling					
(567,000 barrels at \$.40).....		226,800.00			
The depletion charge is calculated below:					
Oil rights:					
The oil withdrawn during 1938 was 27% of the estimated oil in that area, therefore, the charge for depletion is 27% of \$210,000.00.....		\$ 56,700.00			
Drilling and field work:					
Costs incurred.....	\$ 630,000.00				
Estimated additional costs.....	1,600,000.00				
Total estimated cost for 8,000,000 barrels.....		\$2,230,000.00			
The oil withdrawn during 1938 was 8.1% of the estimated oil reserves of 8,000,000 barrels, therefore the charge for depletion is 8.1% of \$2,230,000.00.....		180,630.00			
Depletion charge for 1938.....		\$237,330.00			
The cost of producing 648,000 barrels of oil is as follows:					
Costs of producing and handling.....		\$226,800.00			
Land rental.....		75,000.00			
Depletion.....		237,330.00			
Total cost of 648,000 barrels of oil.....		\$539,130.00			
<i>Gross profit computation</i>					
Sales (567,000 barrels of oil).....		\$567,000.00			
Less: Cost of goods sold (1/8 of \$539,130.00).....	\$ 471,738.75				
Royalty (1/8 of \$539,130.00).....	67,391.25	539,130.00			
Gross profit.....		\$ 27,870.00			
(c)					
Barrels of oil available for sale					
Total production.....	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5
Sold in 1938.....	8,000,000	2,400,000		8,000,000	2,400,000
Royalty.....	567,000	567,000		567,000	567,000
	1,000,000	300,000		1,000,000	300,000
Available for sale by Company A.....	1,567,000	867,000		1,567,000	867,000
	6,433,000	1,533,000		6,433,000	1,533,000

Estimated sales.....	\$6,433,000	\$1,533,000	\$6,433,000	\$1,533,000
Costs common to all plans:					
Unamortized cost of oil rights.....	\$ 643,300	\$ 643,300	\$ 643,300	\$ 643,300	\$ 643,300
Rent (nine years).....	675,000	675,000	675,000	675,000	675,000
Unamortized cost of drilling and field work.....	449,370	449,370	449,370	449,370	449,370
Other costs (estimated)					
Rent for the last 10 years of the lease	750,000			750,000	
Costs of production and handling.....	2,573,200	613,200			
Purchases from Company B at \$.35 per barrel.....				2,251,550	536,550
Additional development cost.....	1,600,000		450,000	1,600,000	
Penalty for failure to develop.....			450,000		90,000
Total estimated costs.....	\$6,690,870	\$2,830,870	\$2,217,670	\$6,369,220	\$2,394,220
Estimated gross profit or loss*.....	*\$ 257,870	*\$1,297,870	*\$2,217,670	\$ 63,780	*\$ 861,220

Plan 4 appears to be the most advantageous one.

COMMENTS

1. The cost of drilling and field work allocated to 1938 was based upon the estimated oil reserves of 8,000,000 barrels and a total estimated cost of \$2,230,000.00. This treatment is in conformity with the statement in the problem that "Company A will charge depletion on the basis of actual exhaustion of the estimated oil reserves." Additional reasons for using 8,000,000 barrels as the basis are:

(a) Company A undoubtedly entered the agreement with the intention of developing the entire property and not only thirty per cent of the property.

(b) Of the costs incurred in 1938 for drilling and field work, \$630,000.00, it is reasonable to assume that some part of this cost was applicable to that part of the property which has not yet reached the producing stage.

2. It should be noted that the costs of producing and handling, before depletion and land rentals, are based on Company A's share of the oil produced and not on the total oil produced.

3. The statement that Company A may abandon the leasehold at the end of ten years was interpreted to mean that land rentals would cease at that time if Company A so elected.

Solution to Problem 4

The following entries are made to record the transactions of Brown and Black:

Cash.....	(1)	\$ 1,000.00	\$ 1,000.00
Brown, capital.....			
Advanced by Brown to bind purchase.....	(2)		
Real estate.....		\$150,000.00	\$150,000.00
Smith, vendor.....			
To record purchase of property.....	(3)		
Smith, vendor.....		\$ 1,000.00	\$ 1,000.00
Cash.....			
Payment to bind contract.....	(4)		
Smith, vendor.....		\$144,200.00	\$120,000.00
Mortgage payable #1.....			6,400.00
Accrued interest payable.....			17,800.00
Taxes payable.....			
To charge Smith for encumbrances.....	(5)		
Jones, vendee.....		\$109,000.00	\$100,000.00
Real estate.....			9,000.00
Profit on sale of real estate.....			
To record sale to Jones (# of property).....			

Y Trust Company.....	(6)	\$151,000.00
Jones, vendee.....		\$109,000.00
Mortgage payable #2.....		42,000.00
To record collection from Jones and proceeds of mortgage #2.		
(7)		
Profit on sale of real estate.....		\$ 330.00
Smith, vendor.....		25,604.00
Taxes payable.....		10,890.00
Jones, vendee.....		2,940.00
X Insurance Company.....		101,786.00
Cash.....		2,540.00
Y Trust Company.....		\$144,090.00
Disbursements by Y Trust Company leaving \$6,910.00 in escrow for balance of taxes. The amount charged to Smith is made up of the following:		
Title search.....		\$ 1,364.00
Guaranty policy.....		400.00
Direct payment.....		23,840.00
		<u>\$25,604.00</u>
NOTE: The following amounts are charged against the profit on the sale of real estate:		
Revenue stamps.....		\$ 150.00
Travelling expenses.....		128.00
Telephone and telegrams.....		52.00
		<u>\$ 330.00</u>
(8)		
Mortgage payable #1.....		\$120,000.00
Accrued interest payable.....		6,400.00
Interest on mortgage #1.....		600.00
Operating expenses.....		330.00
X Insurance Company.....		\$101,786.00
Smith, vendor.....		20,804.00
Jones, vendee.....		2,940.00
Rental income.....		1,800.00
To record settlement with the X Insurance Company, per statement.		
(9)		
Cash.....		\$ 9,000.00
Rental income.....		\$ 9,000.00
Rental income for the remainder of 1938.		
(10)		
Operating expenses.....		\$ 2,700.00
Cash.....		\$ 2,700.00
Operating expenses for remainder of 1938.		
(11)		
Interest on mortgage #2.....		\$ 840.00
Cash.....		\$ 840.00
Payment of interest on mortgage #2 to August 15.		
(12)		
Taxes payable.....		\$ 6,910.00
Y Trust Company.....		\$ 6,121.00
Profit on sale of real estate.....		789.00
To record payment of balance of 1935 and 1936 taxes and all 1937 taxes as follows:		
1935 and 1936 taxes.....		\$12,100.00
Reduction of 9%.....		1,089.00
		<u>\$11,011.00</u>
Payments on account.....		10,890.00
		<u>\$ 121.00</u>
Balance paid.....		\$ 121.00
1937 taxes estimated.....		\$ 5,700.00
Additional amount.....		300.00
		<u>\$ 6,000.00</u>
Amount paid.....		\$ 6,000.00
		<u>\$ 6,121.00</u>

	(13)	
Alterations.....	\$ 2,500.00	
Cash.....		\$ 2,500.00
To record cost of alterations.		
	(14)	
Cash.....	\$ 1,000.00	
Rent received in advance.....		\$ 1,000.00
Rent applicable to future year.		
	(15)	
Operating expense.....	\$ 1,050.00	
Cash.....		\$ 1,050.00
Payment to Black for management services.		
	(16)	
Taxes.....	\$ 2,000.00	
Taxes payable.....		\$ 2,000.00
Accrued taxes for 1938 on $\frac{1}{2}$ of original property.		
	(17)	
Cash.....	\$ 52,000.00	
Real estate.....		\$ 50,000.00
Profit on sale of real estate.....		2,000.00
Sale of remaining $\frac{1}{2}$ of real estate.		
	(18)	
Interest on mortgage #2.....	\$ 630.00	
Accrued interest payable.....		\$ 630.00
Interest from August 15 to December 31.		
	(19)	
Mortgage payable #2.....	\$ 42,000.00	
Accrued interest payable.....	630.00	
Taxes payable.....	2,000.00	
Rent received in advance.....	1,000.00	
Cash.....		\$ 45,630.00
Deposit with the Y Trust Company to cover encumbrances.		
	(20)	
Cash.....	\$ 789.00	
Y Trust Company.....		\$ 789.00
Balance held in escrow for taxes.		
	(21)	
Operating expenses.....	\$ 250.00	
Profit on sale of real estate.....	2,250.00	
Alterations.....		\$ 2,500.00
To write off cost of alterations.		
	(22)	
Rental income.....	\$ 10,800.00	
Operating expenses.....		\$ 4,330.00
Interest on mortgage #1.....		600.00
Interest on mortgage #2.....		1,470.00
Taxes.....		2,000.00
Operating profit and loss.....		2,400.00
To close into profit and loss.		
	(23)	
Operating profit and loss.....	\$ 2,400.00	
Profit on sale of real estate.....	9,209.00	
Brown, capital.....		\$ 5,804.50
Black, capital.....		5,804.50
To transfer net profit to capital accounts.		
	(24)	
Brown, capital.....	\$ 6,804.50	
Black, capital.....	5,804.50	
Cash.....		\$ 12,609.00
To record distribution of cash.		

Brown and Black
Statement of Profit and Loss
January 2, 1938, to December 31, 1938

Real Estate transactions:

Sales.....	\$161,000.00
Cost of property sold:	
Original purchase price.....	\$150,000.00
Revenue stamps.....	150.00
Traveling expense.....	128.00
Telephone and telegrams.....	52.00
Unamortized cost of alterations.....	2,250.00
	<hr/>
Less reduction in taxes accrued at the date of purchase.....	\$152,580.00
	789.00
	151,791.00
<i>Net profit on real-estate transactions</i>	<hr/> \$ 9,209.00
<i>Operation of property:</i>	
Rental income.....	\$ 10,800.00
Less expenses:	
Operating expenses.....	\$ 4,330.00
Interest on mortgage #1.....	600.00
Interest on mortgage #2.....	1,470.00
Taxes.....	2,000.00
	<hr/>
<i>Net profit on the operation of property</i>	<hr/> 2,400.00
<i>Net profit for the year, ended December 31, 1938</i>	<hr/> \$11,609.00

Brown and Black
Statement of Cash Receipts and Disbursements
January 2, 1938, to December 31, 1938

Receipts:

Advance by Brown.....	\$ 1,000.00
From Y Trust Company (per account).....	2,540.00
Rent received.....	9,000.00
Deposit to secure lease.....	1,000.00
Refund on tax settlement.....	789.00
Sale to Jones.....	<hr/> 52,000.00
<i>Total</i>	<hr/> \$66,329.00

Disbursements:

Paid to Smith to bind contract.....	\$ 1,000.00
Operating expenses.....	2,700.00
Interest on mortgage #2.....	840.00
Alterations.....	2,500.00
Salary to Black.....	1,050.00
Deposit with Y Trust Company to cover encumbrances.....	45,630.00
Distribution to partners:	
Brown.....	6,804.50
Black.....	<hr/> 5,804.50
<i>Total</i>	<hr/> \$66,329.00

COMMENTS

In entry 8, the interest on mortgage #1 from January 1, 1938, to February 15, 1938, is charged as an expense of Brown and Black and the net operating income for that period is divided two-thirds to Jones and one-third to Brown and Black. The entire net income of 1937 is applicable to Smith.

GENERAL COMMENTS

This department, as readers know, has often felt obligated to criticize the C.P.A. examinations given by the Institute. It is realized, only too well, that those criticisms may have seemed to underestimate the work of a group of men who unselfishly give their time and energy to service on the Institute's board of examiners and

who are earnestly trying to do a good job. Under these circumstances, criticism becomes a task most distasteful to the critic. If these criticisms have been of a constructive nature they have been justified. Criticisms will continue as the need for them seems to arise.

It is a pleasure to report our appraisal of the most recent examination, the first half of which was published in the June issue of the ACCOUNTING REVIEW. In our opinion this examination is a decided improvement over those of the past few years and it should be recognized as a fair test of an examinee's ability.

Problems 1, 3 and 4 of this section are good problems which call for the exercise of judgment and care and should bring forth the candidate's general knowledge of accounting. Problem 2, which was given a weight of only 15 points, is of the "formula" types and of no great value in a C.P.A. examination.

The following time schedule may prove helpful to those interested in solving the problems:

Problem 1	30 minutes
Problem 2	40 minutes
Problem 3	90 minutes
Problem 4	90 minutes

After the June issue of The ACCOUNTING REVIEW had gone to press, a letter was received from Professor Lloyd Morey commenting on problem 3 of Part I of the examination in accounting theory and practice. Professor Morey pointed out that the National Committee on Municipal Accounting had recommended that bond funds be used to record the receipt and disbursement of the proceeds of bonds issued for purposes other than special assessments and utilities. In the problem as presented no recognition was given to the idea of a bond fund.

THE ACCOUNTING EXCHANGE

PROFITS IN A THEORY

Thirty-seven years ago William Hughes, an actuary in London, threw out a suggestion. He thought it would be interesting if someone possessed of the necessary patience would ascertain "on paper" what would have been the results of a fund invested in common stocks as against one invested in high-grade bonds, but over a long period of years.

Nothing was done about Mr. Hughes' suggestion until in 1912 Professor Irving Fisher, of Yale University, and some of his associates revived the question. They proposed that in order to keep pace with the cost of living one's investments would have to be in equities rather than in bonds, or in investments having equity connections.

It was not, however, until the late 'twenties that the idea was really sold to the investing public. This was the period of the formation of hundreds of "investment trusts," especially trusts confining their portfolios almost entirely to equities. In most cases common-stock equities predominated. Anyone committing his funds to a common-stock trust was "investing in America."

Many people now attribute much of the great boom in security prices of the late 'twenties to the public's enthusiastic acceptance of the common-stock theory. This theory was popularized by the writings of two men: Edgar Lawrence Smith, a New York investment trust manager, in his *Common Stocks as Long Term Investments* (1924), and Kenneth S. Van Strum, a New York investment counselor, in his *Investing in Purchasing Power* (1925). A later and more theoretical treatment appeared in *The Common Stock Theory of Investment* (1937), by Professor Chelcie C. Bosland, of Brown University.

The essence of the common-stock theory may be stated as follows: assuming the continuing growth of industry, then over long periods of time investment in a diversified list of representative, leading, industrial common stocks will prove to be a better investment than will investment in high-grade bonds—better from the points of view of amount of dollar income, amount of real income (purchasing power), and market value of principal.

It is obvious, of course, that if this theory is accepted by the investing public, common stocks will enjoy a favoritism far beyond what they would otherwise experience. It is likewise clear that investment trusts confining their portfolios to common stocks will find a ready market for their own equity securities.

So many misunderstandings have arisen because of misinterpretation of the common-stock theory that it may be desirable to clarify the issue. The following points may be noted with profit:

1. The common-stock theory does not hold that investment in common stocks is invariably better than investment in high-grade bonds.
2. The theory does not hold that investment in a diversified group of common stocks taken at random is better than investment in high-grade bonds.
3. The theory does not maintain that investment in carefully analyzed common stocks is better than investment in high-grade bonds, not even when the common stocks are diversified.
4. The theory does not maintain that the secular trend of industry will always be upward.
5. The theory does not insure one against the loss of any part of income from the investment.
6. The theory does not certify that the market value of the common-stock portfolio, however selected, will at all times be greater than that of an equal fund in high-grade bonds.

But the theory does hold that *assuming the continuing growth of industry, then over long periods of time* investment in a diversified list representative, *leading*, industrial common stocks will prove to be superior to an equal investment in high-grade bonds. In other words, the common-stock theory assumes (1) the continuing growth of industry, (2) diversified portfolios, (3) representative companies, (4) leading issues, (5) industrial stocks, and (6) long periods of time. Omit any of these assumptions, and the circumstances do not fit the theory.

During the depths of the depression, that is, in the early 'thirties, the common-stock theory was discarded by many investors as having been disproven by the criteria of both market value and income. There were two errors in such a claim. One was that it was based upon a remarkable period of only two or three years. The other was that even for those two or three years, unless one had purchased equities at the prices prevailing in the late 'twenties, the claim did not stand anyway.¹

There are several cardinal points that must be recognized in any evaluation of representative, leading, industrial common stocks as long-term investments. Among these we may include the following:

The common-stock theory is based, in part, upon the continuing expansion of industry. Expansion of industry is based, in part, upon the growth of population and upon the accelerating speed of modern living. The latter factor may readily be assumed as continuing unobstructed. The former (the growth of population) is open to qualification. Our immigration laws do not permit a heavy quota, and in some years there has been very little *net* immi-

gration; indeed, in some years there has been a slight net *emigration*. Furthermore, the birth rate has been declining persistently, and it may reasonably be assumed that it will continue to decline for some years to come. The prolongation of life, however, is tending to offset the declining birth rate, though it does not do so completely. Moreover, the age distribution of the population is changing; we are obtaining a greater percentage of older people. This does not imply, however, that wheel chairs may be expected to displace baby carriages. Summarily, population is still growing, but not at as great a rate as formerly. Consequently, the growth-of-population factor in the expansion of industry is not as important as it formerly was. But the accelerating speed of life is—indeed, it is even more important.

It is probable that, in general, notwithstanding the reduced rate of population growth, industry will continue to expand. And if it expands, then assuming no major change in our economic system, it follows that the common-stock principle will continue in force. There is one point which should be brought out in this connection: that the common-stock theory does not require that the investor get in on the ground floor. Rather he should try to embark upon his investment on a middle or early middle floor because there are too many casualties among ground-floor investments.

It is probable that the imposition of a tax on the retention of profits in business operates against the expansion of industry and therefore against the workings of the common-stock theory. It does not prevent the expansion of industry, for a large portion of undistributed profits can be retained, and if not retained new capital can be obtained through the flotation of new security issues. Nevertheless, the presence of the undistributed profits tax does at least *discourage* the expansion of industry.

¹ The latter point was supported by two articles of mine in 1934: (1) "A Reconsideration of the Common Stock Theory," in the *Journal of Business of the University of Chicago*, January 1934; and (2) "King Midas and His Common Stocks," in *Barron's*, April 30, 1934.

Labor's position has been greatly strengthened in recent years. Labor problems, on the surface, work against the operation of the common-stock theory. Nevertheless, it must be admitted that a greater, widespread purchasing power of the population in general is a factor in favor of equity investors, assuming that such purchasing power can be maintained.

"Inflation" is now an ever-present factor psychologically if not otherwise. The possibility of "inflation" is at least a minor factor working toward the maintenance of higher levels.

Much criticism has been levied against management as a whole in its attitude toward stockholders. But the management factor is improving. Management is now beginning to exhibit a sharpened feeling of responsibility to stockholders. This development has been partly forced and is partly voluntary.

According to some authorities, the common-stock theory has been so widely popularized that the likelihood of its working in future has been greatly diminished—this on the grounds (1) that the competitive bidding for common stocks causes prices to be relatively high, thus limiting the possibilities of high yield and of gain in principal; and (2) that common-stock prices will not soon again represent a 7-to-10-times-average-earnings basis if yields on high-grade, long-term bonds remain below 5%.

It seems to me, however, that this is both an overly optimistic and rather pessimistic conclusion. It is overly optimistic in that it assumes that the public has a good memory—which certainly is not the case. The investing public is convinced of the profitability of the common-stock theory only when stock prices and dividends on stocks are high, and is equally convinced of its unprofitability when stock prices and dividends on stocks are low. The conclusion is somewhat optimistic in

that it assumes that common-stock prices "will not soon again" capitalize average earnings at 7 to 10 times earnings while long-term, high-grade bonds are yielding 5% or less. They may not and probably will not do so this year, perhaps not within a "long" time. But they did in 1931-1933, and they did again in 1938. And the conclusion is rather pessimistic in assuming that consequently good buying opportunities will probably not appear. They did appear in 1938, and at some indefinite time in future they will appear again.

Finally, as to the present validity of the common-stock theory, it should be marked well that at no time to date, except from purchases made in the very late 'twenties, could the validity of the theory be challenged; and further that, if the time has come to discard the common-stock theory as a general principle, there is grave doubt that we should go into business at all. Barring exceptional circumstances, if we cannot anticipate a profit well in excess of that available from nonequity securities, and cannot assume the continuing growth of industry, we would certainly do better to refrain from entering into business ventures at all and to revise our lives sufficiently to confine capital funds to the highest grade, non-risk-bearing commitments.

In order to check the statistical truth of the common stock-theory as of the present movement, I very recently brought down to date (end of December 1938) much of the data which I presented as of the end of 1933 in *Barron's* of April 30, 1934. The latter report confirmed the validity of the theory as to money income, real income, and market value as of that time. Though I have not carried these tests out in great detail for this article (since only five years have elapsed), I have investigated sufficiently to be certain that, as applied to representative, leading, industrial common stocks—which the theory holds to be essential—and using estab-

lished tests as a basis, there is no question of the success of the principle. Consequently, unless reversed in future by incontestable evidence, the common-stock theory still stands. This is to say, then, that until successfully contradicted, it still pays over long periods of time to own representative, leading, industrial common stocks.

Nothing in this article is intended to imply that the present or any other time is the best time to purchase them. The timing of investment transactions is beyond the scope of this discussion. The purpose of this brief review is merely to confirm the validity of the common-stock theory. As an investment principle, it has great significance, and as a social force, it has wide ramifications.

GILBERT HAROLD

ACCOUNTING THESES

Theses Accepted for the Ph.D. Degree, Year Ended June, 1939:

Accounting for Farm Costs, James W. DaVault, *Columbia University*.
 Analysis of the Accounting Requirements for Industrial Corporations Under the Securities Act of 1933, Benjamin A. Greidinger, *Columbia University*.
 Anti-Chain-Store Tax Legislation, Maurice W. Lee, *University of Chicago*.
 Cost Determination for the Control of Load Building and Rate Making in Electric Utilities, Cedric W. Lutz, *Harvard University*.
 Some Financial and Regulatory Problems of Retirement Accounting in Public Utilities, Thomas H. Carroll, *Harvard University*.
 Municipal Electric Utility Accounting, Robert E. Walden, *State University of Iowa*.
 The Relation of the Concept of Accounting Cost to Accounting Knowledge, John Wood McMahan, *University of Illinois*.
 A Study of Certain Aspects of Cost Analysis from the Standpoint of Business Management, Walter B. McFarland, *Stanford University*.

Ph.D. Theses in Progress as of June, 1939:

Accounting for Fixed Depreciable Assets, Harold G. Avery, *Columbia University*.

Accounting for Inventories and the Business Cycle, Arleigh R. Burton, *University of Nebraska*.

Accounting for the Managers of Consumers Cooperatives, Lennard G. Bryngelsson, *Columbia University*.

The Accounting Problems Underlying the Adjustment of Merchandise Losses, Leo Rosenblum, *Columbia University*.

Background of Financial Policy in the Declaration of Dividends, Raymond Einhorn, *University of Illinois*.

Building Construction Cost in Relation to Construction Activity in the Chicago Area, William Vatter, *University of Chicago*.

Changing Concepts of Depreciation, Edward J. Kirkham, *University of Illinois*.

Competition and Cost Under the Robinson-Patman Act, Theodore Lang, *Columbia University*.

Cost Accounting in Sales Management, Donald R. Longman, *Columbia University*.

A Critical Analysis of Certain Formulations of Accounting Principles, Leslie J. Buchan, *University of Illinois*.

The Determination of Accounting Income, Reuel I. Lund, *University of Minnesota*.

Devaluation and Appreciation of Fixed Corporate Plant from the Standpoint of Accounting, Winfield S. Briggs, *Columbia University*.

Divergences from Good Accounting Practice Required by the Federal Income Tax Law, Charles J. Gaa, *University of Illinois*.

Earning Assets of Banks in the Shenango and Mahoning Valleys in Years of Prosperity and Depression from 1927 to 1936, Inclusive, Captain William McKee, *University of Chicago*.

Economic and Social Aspects of Holding Companies, Raymond V. Cradit, *University of Chicago*.

Educational Preparation for Professional Accountancy, Walker E. Campbell, *University of Illinois*.

The Effect on Accountancy of State and Federal Regulatory Commissions, Jennings Bland Pope *University of Texas*.

An Evaluation of the Usefulness of Accounting in the Preparation of a Defense Against Charges Brought Under the Robinson-Patman Act, William E. Thomas, *University of Illinois*.

Evolution of Elementary Cost Theories and Techniques, S. Paul Garner, *University of Texas*.

Federal-State Relations in the Financing of Relief, F. H. Bunting, *University of North Carolina*.

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Fiscal Readjustments in North Carolina, 1929-1937, C. H. Donovan *University of North Carolina*.

The Influence of Costs on Production and Price Policy in a Joint-Product Industry, Francis Murray Boddy, *University of Minnesota*.

Internal Auditing Policy, Victor Brink, *Columbia University*.

Inventories and Business Income, Carl Devine, *University of Michigan*.

Logical Transaction Analysis, George B. McCowen, *University of Illinois*.

Legal Regulations of Accounting, Vivian Dake Jolley, *University of Chicago*.

Marketing Costs, Gould Leach Harris, *Columbia University*.

The Objectives and Implications of Uniform Cost Accounting, Michael Jucius, *University of Chicago*.

Operating Results of Municipally-Owned Public Utilities in North Carolina, C. E. Kuhlman, *University of North Carolina*.

Quantitative Methods in the Control of Sales, Robert P. Eastwood, *Columbia University*.

The Realization of Income and Federal Tax Procedure, Russell Bowers, *University of Michigan*.

The Relation Between Accounting and Certain Recent Developments in the Statutory Law of Business Corporations, Norbert G. Bausch, *University of Illinois*.

Study of Hospital Costs of Nurses' Education and Value of Services Rendered, Charles A. Rovetta, *University of Chicago*.

A Theory of Cost Accounting for Management, Billy Goetz, *University of Chicago*.

The Undistributed Profits Tax and Corporate Management, Thomas F. Debnam, *University of Chicago*.

Master's Theses Completed, Year Ended June, 1939:

Accounting for Automobile Dealerships, Charles Bastable, *Columbia University*.

The Accounting Aspects of Advertising Coupons, Alexander Kirkman, *New York University*.

Accounting for Building and Loan Associations in the United States, Richard M. Toon, *Washington University*.

Accounting of the Chinese Railways, Zen Chow, *Northwestern University*.

Accounting Control over Retail Sales of Automobile Finance Companies, Harold Deller, *College of the City of New York*.

Accounting Controls in the Seventh Day Ad-

ventist Church Organization, H. D. Wheeler, *University of Washington*.

Accounting for Delivery Trucks, A. Ross Evans, *Columbia University*.

Accounting for Depletion in Metal Mining, George E. Doty, *Columbia University*.

Accounting for Executors, Mary Twigg, *Columbia University*.

Accounting for Funds in a Municipality, Eugene Burke, *Columbia University*.

The Accounting for Installment Sales of Personal Property, Robert Rapport, *Columbia University*.

Accounting for Interest on Owners' Capital, Thomas D. Flynn, *Columbia University*.

Accounting for Pecan Cooperatives, Orrin J. Wenzel, Jr., *Louisiana State University*.

Accounting for Printing Concerns, Frances Young, *Columbia University*.

Accounting and Probate Procedure in Illinois, Bruce Futhey, *State University of Iowa*.

Accounting Procedures for the Collection of Data for State Premium Tax Returns and State Information Returns Used by Mutual Life Insurance Companies in Philadelphia, William S. Stock, *University of Pennsylvania*.

Accounting Procedure Under the Securities and Exchange Commission, Alfred Halper, *New York University*.

Accounting Procedure for a Small Hospital, Stanley A. Pressler, *Northwestern University*.

Accounting in Protestant Churches, William Leary, *Columbia University*.

An Accounting System for a Summer Camp, G. Menzies Rodger, *Columbia University*.

Accounting Treatment of Dividends, Frederick H. Koshkin, *Louisiana State University*.

The American Institute of Accountants, 1916-1936, Russell W. Carr, *University of Illinois*.

An Analysis and Appraisal of Proposed Solutions to the Financial Problems of School District No. 19, Lane County, Oregon, John S. Mykut, *University of Oregon*.

An Analysis of Certain Aspects of Some of the Current Attempts by the States to Prohibit Sales Below Cost, Robert Tannenbaum, *University of Chicago*.

Some Aspects of Accounting and Management Control in Apartment House Operation, Seymour Kimmel, *Columbia University*.

Some Aspects of Federal Control Over the Aluminum Monopoly, Julius Roller, *University of Washington*.

Some Aspects of the Public Accounting Partnership, Alexander Spence, *Columbia University*.

An Asset Approach to the Concept of Income, Robert K. Mautz, *University of Illinois*.

An Auditing Study of Certain Cases of Bank Defalcation, John Vosatka, *State University of Iowa*.

Balance Sheet Practice in Respect of Current Assets—A Study of Balance Sheets Filed Recently with the Securities and Exchange Commission, Abraham Schwartz, *Northwestern University*.

Balance Sheet Presentation of Net Worth Under the Securities Exchange Commission, Walter J. Crawford, *Northwestern University*.

Bank Accounting and Cost Control, Ralph B. Pendery, *Boston University*.

Bases of and Considerations Governing the Consolidation or Exclusion of Affiliated Companies in the Preparation of Reports and Financial Statements, Martin Burke, *Columbia University*.

The Base Stock Method of Inventory Valuations, Woolsey Carmalt, *New York University*.

Basic Operations, Financial Analysis, and Accounting for the Curtain Industry, Richard Herson, *Columbia University*.

Bookless Bookkeeping for Electric and Gas Utilities, Julius Ilchik, Jr., *New York University*.

Budgetary Control of Raw Material Costs in Manufacturing Establishments, Abe Louis Shugerman, *Louisiana State University*.

Building a Business Curriculum in a Negro College, Milton B. Oldham, *New York University*.

By-Product and Joint-Product Cost Accounting in the Petroleum Industry, Donald Greene, *Columbia University*.

Capital Gains Taxation: Theory and Practice, Richard Munsche, *New York University*.

A Case Study in Installation of an Accounting System for Garment Manufacturing Business, Cletus F. Chizek, *University of Chicago*.

A Comparative Study of the Business Information of Commercial and Non-Commercial Students at the High Schools in El Paso, Texas, Mathilde Hardaway, *University of Chicago*.

Comparative Systems of Social Security, Burton Chasan, *New York University*.

Controllership Accounting in Department Stores, Benjamin F. Davis, Jr., *University of Pennsylvania*.

Controversial Points in Partnership Accounting, Walter B. Calhoun, *Louisiana State University*.

Corporate Balance Sheet Disclosures, L. Edwin Smith, *University of Texas*.

Cost Accounting for Army Post Administration, Major Thomas P. Walsh, *Columbia University*.

Cost Accounting for Flour Mills, Hazel F. Shore, *Northwestern University*.

Cost Accounting in the Manufacture of Rubber Tires, George W. Lafferty, *University of Pennsylvania*.

Cost Accounting for an Oil Refinery, Frank A. Ketcham, *Columbia University*.

A Cost Accounting System for a Silk Textile Mill in China, Lou Er-ping, *Northwestern University*.

Cost Price Relationship in the Lithographic Industry, Marcus Higginbotham, *New York University*.

Defalcation: How Concealed and How Revealed, Norman Ehrenberg, *Columbia University*.

Depreciation in Corporate Reports, Alfred Wood, *Columbia University*.

Determination of Cost and Fair Market Value Bases, William Marvin Cooper, *Northwestern University*.

Determining Costs for the Lamp Industry, Emery H. Skinner, *University of Chicago*.

Determining the Cost of Security and Servicing a Personal Trust Account, Thomas J. Crean, *New York University*.

The Development of Accounting in the United States Government, 1918-1938, George B. Vasen, *University of Illinois*.

The Development of Accounting Functions, Douglas Stone, *University of Missouri*.

The Development of Uniform Accounting Systems, Milan R. Bump, *New York University*.

Dividend Distributions of the Going Concern, Edwin Gallant, *Columbia University*.

The Economic Adjustment of the Graduates of the Business Department of Thornton Fractional Township High School, Calumet City, Illinois, F. Wahnetah Brummett, *University of Chicago*.

Economic Significance of Writeups of the Fixed Assets of the Associated Gas and Electric Company, David A. Siegel, *New York University*.

Effect of the Securities and Exchange Commission on Accounting Principles, Alvin Link, *Columbia University*.

Embezzlements, James P. Joice, Jr., *New York University*.

An Evaluation of the Commercial Courses of Downers Grove, Illinois, High School Based upon the Experiences of Its Graduates, Clark Mahr, *University of Chicago*.

An Evaluation of Financial Reports Prepared for Employees, Frank C. Soule, *New York University*.

Fixed Assets and Related Accounts—A Case Study of Fifty Petroleum Companies, Edmund L. Schlaeger, *Northwestern University*.

Fixed Asset Valuation for Industrial Corporations, Nobert F. Huber, *University of Rochester*. Financial Control, Severin A. Norstrand, *New York University*.

Financial Statements in the Public Accountants' Report, Cearley R. Kinard, *Columbia University*.

The Flexible Budget and Factory Overhead Expense Control, Charles M. Merriman, *University of Pittsburgh*.

Georgia County Audits, J. E. Brakefield, *University of Georgia*.

Graphic Analysis in Cost Accounting, Allen Weiss, *New York University*.

Interpretation of Accounting Principles by the Securities and Exchange Commission, Charles F. Barrett, *New York University*.

Inventories—A Case Study of Published Balance Sheets, Arnold Owen, *Northwestern University*.

The Last In-First Out Method of Inventory Valuation, Lloyd G. Briggs, *New York University*.

The Last In-First Out Method of Inventory Valuation, Norman D. MacDonald, *New York University*.

The Law Regarding Dividend Payments in Wasting Asset Industries, Joseph Salinger, *Columbia University*.

Liability of the Public Accountant for Negligence, Elizabeth Walker, *Columbia University*.

A Manual for Teachers of First Year Bookkeeping, Monroe H. Hubbell, *University of Washington*.

Mathematics in Accounting, Gamaliel Weisbach, *College of the City of New York*.

Methods of Calculating Margin in Brokerage Accounts, Frederic B. Ackermann, *New York University*.

New York State Unemployment Insurance, Saul Guberman, *New York University*.

The Non-Objective Elements in Accounting (A Study of Accounting Principles), Isidore Gordon, *College of the City of New York*.

Opportunities for the College Graduate in the Field of Public Accounting in Pennsylvania, Patrick J. Aquilian, *University of Pennsylvania*.

Paid-in and Earned Surplus, Walter Hartmeyer, *Columbia University*.

Payroll Accounting for The New York Telephone Company, T. C. Jones, *New York University*.

The Presentation of Current Liabilities in Registration Statements Filed with the Securities and Exchange Commission, Hugh L. Macauley, *Northwestern University*.

Principles of Accounting Involved in the Preparation of Consolidated Statements, Norman Cannon, *Columbia University*.

A Proposed Accounting and Office Procedure in Public Schools, Glen I. Myers, *University of Illinois*.

The Public Accountant and the Federal Securities Acts, Joseph J. Wagner, *New York University*.

Punched Card Accounting at a Navy Yard, Hyman Kammerman, *College of the City of New York*.

Railroad Depreciation, Fred W. Hunold, *New York University*.

A Ratio Analysis for Industrial Balance Sheets with Special Reference to the Decline of Commercial Loans, Earl Loran Smith, *University of Chicago*.

The Relation of Cost-Purpose to Cost-Content, Hugh Cannon, *University of Chicago*.

The Retail Inventory Method of Valuation and Control, Irwin Klipstein, *Columbia University*.

Revaluation of Fixed Assets and the Measurement of Income, Milton M. Rulnick, *New York University*.

Selected Problems in Accounting for Labor, Leo J. Sametz, *New York University*.

Selected Problems Arising from Consolidated Balance Sheet Construction, Donald M. Gamet, *University of Kansas*.

Seventeenth Century Accounting in England, Ruby Nell Hagan, *Columbia University*.

Standardized Accounting, Auditing, and Reporting for the Municipalities of the State of Kansas, A. Theodore Mueller, *University of Kansas*.

Statistics as an Aid to Managerial Control in Whisky Concerns, William C. McNeill, *New York University*.

Surplus in the Columbia Gas and Electric Corporation, Edward J. Schmidlein, *New York University*.

A Survey of the Accounting Solutions to the Problem of Appreciation, Bertha Slutzker, *Columbia University*.

A System of Accounts for a Typical Savings Bank, William R. Foyle, *Columbia University*.

Tax Avoidance and Tax Evasion, Robert Christopher, *University of Chicago*.

Taxation of Non-Resident Alien Individuals, Maurice H. Rich, *New York University*.

Technique of Preparing Consolidated Statements, Francis Casselman, *New York University*.

Time Study and Unit Costs, Jerome Sokolski, *New York University*.

Treatment of Intangible Costs and Expenses of Oil Companies, Philip P. Stagg, *Louisiana State University*.

Unemployment Compensation in the State of Virginia, Joseph S. Flax, *New York University*.

HILDA R. STICE

The Accounting Review

THEORIES AND PRACTICE

As long ago as 1926 the LOOKING present editor of THE BACKWARD COUNTING REVIEW was advocating the adoption by accountants of standards in the preparation of financial statements and a uniform terminology that persons other than accountants could understand, commenting as follows:¹

Persons in the habit of examining published [financial] statements will likely regard twenty per cent a high estimate for balance sheets which offer the possibilities of complete and intelligent interpretation. And the sad comment must be added that the deficient eighty per cent have not, all of them, escaped the presumably leavening hand of the public accountant. It is difficult to believe that practicing accountants can be guilty of the laches which their published statements betray; or, if charity must be extended them, that they permit their balance sheets to be so condensed and abbreviated that the original significance becomes lost. . . . Those who teach accounting would be of the greatest service at the present moment if they would unsparingly criticize obscure published statements of financial condition. . . . A fertile field of inquiry would seem to lie in the examination of balance-sheet terminology and classification with a view of determining, not what the standards should be [this would come later], but rather what the standards are. . . . Balance sheets . . . should not be permitted to become so technical as to degenerate into vehicles for concealing truths from the unsophisticated, nor yet, on the other hand, to become so finished a creation of those mechanically minded adornments of the profession that facts are subordinated to pretty typing, a gold seal, and much red ink. . . .

In 1929, the editor proposed to the American Society of Certified Public Accountants a program of research that

would lead to the adoption of professional standards. He said:²

. . . The profession has failed to establish scientific standards and has as yet set no machinery in motion whereby such standards may be assured for the future. Until an agency is created to bring together the best thought in the profession, and to provide a working program looking forward to the positive and rational development of the whole profession, not only must committee reports setting forth standards be regarded as tentative, but they must also be actually discouraged, since persons outside the profession may be misled into thinking that committee-formed standards have a scientific basis, that they have found general acceptance in the profession, and that the various professional bodies will enforce observance of these standards upon their members.

In this 1929 report, a professional research body was recommended that would

- (1) Create a body of definitions.
- (2) Set standards for professional examinations.
- (3) Devise uniform audit procedures and other standards essential to professional activities.
- (4) Compile current and comparative statistical data vital to financial interpretation.
- (5) Draw up uniform accountancy laws, with improved provisions for preliminary education, period of practice, and so forth.
- (6) Encourage scholars to make independent excursions into accounting theory and practice.
- (7) Cooperate with agencies engaged in business research by suggesting fields for investigation and assisting in the securing of material for them.
- (8) Suggest curricula and minimum content of courses in accounting for educational institutions at their request.
- (9) Provide an enforceable code of ethics for professional accountants, based on previously created, definite standards

¹ THE ACCOUNTING REVIEW, I (Dec. 1926), 1-9.

² Report of the Committee on Technical Affairs, *The Certified Public Accountant*, IX (1929), 283-4.

The report continues:

Several of the activities as above outlined could not be completed within the period suggested [five years]. In fact, some of them are of a continuous character, and subagencies would have to be provided for their perpetuation. The important thing would be to set the machinery in motion so that each division of the program might function in harmony and have results consistent with every other division, a task in itself of no slight importance. The plan of each activity would have to be drawn in considerable detail before any one could be commenced. And again, the whole project, to be assured of success, would have to be well financed. Yet these obstacles are more apparent than real. It is believed that a number of accountants, whose scholastic and professional attainments are of a high order, are available, and that any one of them could be induced to head the agency herein described. It is further believed that the profession is vitally interested in these matters and could be induced to underwrite the venture.

Two years later, in 1931, the editor discussed before the same Society possible financial-statement standards, concluding with the comment that the Society could "perform a valuable service to the profession and contribute much to the business world by codifying and publishing minimum standards."³

Before the American Association of University Instructors in Accounting, later in 1931, the editor urged a ten-year plan of research, asserting that "the flesh and blood of a vital professional body of courageous and independent practitioners are wanting."⁴

In December 1934, THE ACCOUNTING REVIEW contained an editorial entitled "A Nervous Profession." The traditional ideas of accountants were being severely jolted in 1934. Strike-suits which were being brought against members of the profession were becoming a legalized racket. Those of us who can remember back that far may also recall that the Securities and Exchange Commission in one

short year had already made well-founded complaints against the accounting profession; that the profession had been singularly unresponsive to the enlarged social responsibilities the Commission was trying to get the profession to acknowledge; and that individual members of the profession had strenuously opposed regulations which the Commission had made over certain accounting procedures. Fears were expressed that the Commission might even undertake regulation by setting up standards of conduct for the profession to follow.⁵

In this editorial was the comment, a somewhat savage one, no doubt, on the extraordinary willingness of the leaders of the profession to let others do their thinking for them. The editor had in mind that one well-known member of the profession, long wary of innovations in professional responsibilities, had in that same year issued a committee report larded over with such pacific remarks as:

... principles of accounting cannot be arrived at by pure reasoning ... the Institute should proceed with caution ... should act with care and deliberation ... endeavor whenever possible to secure the concurrence of somebody possessing high authority in the rules or principles which it lays down ... cooperation with the [Securities and Exchange] Commission [should assure] that the methods prescribed by that body conform to the best accounting opinion and shall not be prejudicial to the welfare of the profession or the community ... the accountant's judgment must not be hampered; his duties must not be circumscribed. . . .

The editor then proceeded to decry the smug attitude of the professional accountant, and contrasted his social capacities with his publicly expressed social attitude. He intimated, with some bitterness, that the many years of prosperity enjoyed by a number of accountants, together with

³ The case for the Commission was well put by one of its members, Robert E. Healy, before the American Accounting Association in 1937. THE ACCOUNTING REVIEW, XIII (1938), 1.

⁴ *The Certified Public Accountant*, XI (1931), 373-6.

⁵ THE ACCOUNTING REVIEW, VII (1932), 1-10.

the control of the profession which that prosperity had made necessary, had produced in them an irritating complacency and sense of security, and had rendered them so helpless as to make them more morally than legally dependent on their attorneys, even for the content of their certificates. It was asserted that certain leaders in the profession considered it essential that they be unfettered by standards, in order that their practices might be adaptable to the varying demands of clients; and the hint was dropped that in view of this need any move toward the standardization of procedures must be viewed by them with considerable alarm.⁶ The necessity of guarding this property right of flexibility, had indeed inspired a few professional plutocrats with the desire of dominating and glorifying as their protector one of the national accounting bodies, and had led them to ensure the continuance of their domination through the rigorous exclusion of democratic controls in the government of and representation in that body.

In the same issue of *THE ACCOUNTING REVIEW* there was another editorial claiming that "standards must come," and discussing briefly five or six "rules or principles"⁷ that a committee of the American Institute of Accountants had formulated, with the comment that "little apparently may be hoped" from that source. University instructors were urged to assume "their proper leadership in defining accounting standards."⁸

The editor was of course not alone in seeking to have accountants take a more responsible part in shaping their professional destiny. Other members of the profession

had become vocal,⁹ and 1935 saw a re-casting of the national organization of accounting instructors into the American Accounting Association, followed six months later by the publication of "A Tentative Statement of Accounting Principles underlying Corporate Financial Statements," which today is in the process of revision. In 1938 the American Institute of Accountants issued "A Statement of Accounting Principles," written by Messrs. Hatfield, Sanders, and Moore for the Haskins and Sells Foundation. And in 1939, as the result of the McKesson and Robbins fraud, the Institute appointed a Special Committee on Auditing Procedure whose purpose was to consider the extension of the scope of audits in an endeavor to make possible the detection of such frauds in the future; it also solicited from its members a "Research Fund" so that studies might be made under a Committee on Accounting Procedure preliminary to the issuance of a series of "pronouncements," presumably dealing with current controversial issues. Within the last few months, the Institute has issued four pamphlets; the first, "Extensions of Auditing Procedure," and the others, "Accounting Research Bulletins" 1-3.

To the editor, the AND NOW significant thing is that THE PRESENT after many years, regardless of the proximate cause, the research program of a national professional accounting society is under way and is bearing fruit. Its first products are at hand. What do these pamphlets say? What significance have these pronouncements? To what extent does it appear that the research needs of the profession are being met? The answers that follow may be interpreted in the light of the hope of the writer of these

⁶ *THE ACCOUNTING REVIEW*, IX (1934), 334.

⁷ These same "rules" have now been repeated and approved in *Accounting Research Bulletin* No. 1, p. 5.

⁸ *THE ACCOUNTING REVIEW*, IX (1934), 335-6.

⁹ For example, Frederick B. Andrews in the *Journal of Accountancy*, LVII (1934), 55; Howard C. Greer, "A Council on Accounting, Research," *THE ACCOUNTING REVIEW*, VII (1932), 176; Carman G. Blough,

"The Need for Accounting Principles," *THE ACCOUNTING REVIEW*, XII (1937), 30.

lines, as outlined above: that the profession, to establish and preserve its rightful independence, must enter the field of research and derive therefrom standards of practice for the guidance of its members.

It is unfortunate that the four pamphlets thus far published give no evidence of extensive research nor of well-reasoned conclusions. They reflect, on the other hand, a hasty marshaling of facts and opinions, and the derivation of temporizing rules to which it is doubtless hoped that a professional majority will subscribe. As models of approach in a field already heavily burdened with expedites and dogmatism, they leave much to be desired.

AUDIT EXTENSIONS Made public in May, the first pamphlet is entitled "Extensions of Auditing Procedure."

Its subject-matter is divided into four parts: (1) the examination of inventories; (2) the examination of receivables; (3) the appointment of auditors; and (4) the form of certificate or report. Under the first heading is outlined the added responsibility that the auditor should now take by participating in a reasonable portion of the count of physical-inventory quantities, either at the closing date or, where periodically tested perpetual-inventory records are maintained, at any date or dates he may deem necessary. Participation may be limited to observation where adequate controls have been instituted by the management over the counting process. Failure to participate requires an exception in the certificate. The second "extension," dealing with receivables, calls for their verification by correspondence to whatever extent deemed necessary by the auditor; without such verification the certificate is to be qualified.

What is the practical effect of these "additional" audit duties? Many firms of accountants have for years required that

these steps be taken in ordinary audit procedure, with exceptions only under the most unusual circumstances. As a matter of fact, the auditors of McKesson and Robbins had test-checked inventory quantities to some extent but had been denied adequate access to the basic records of a certain branch of the business—a branch that is now known to have been wholly fictitious. The conditions under which the auditors had been hoodwinked for years have been shown to be so utterly fantastic as to warrant the conclusion that the possibility of their repeating themselves is extremely remote. With the rules in force now suggested by the Institute's pamphlet it would still be possible for frauds to occur, possibly remaining undetected by auditors, provided the same dishonest individuals were to continue as the corporation's officers. Nothing substantially new is suggested in the pamphlet; the audit of receivables and inventories is still on a test-check basis, as it could hardly otherwise be.

Must it be said, then, that audits by public accountants can neither prevent nor uncover frauds? It must be admitted by all accountants that in a few cases the answer will have to be "yes": no methods having universal application can be devised that will detect every form of criminal dishonesty. The pamphlet says:¹⁰

In no sense is he [the auditor] an insurer or guarantor. . . . The discovery of defalcations has not been a primary objective of an examination incident to the issuance of financial statements. . . . In a well organized concern the principal reliance for the detection of such irregularities is placed upon the maintenance of an adequate system of accounting records with appropriate internal check and control. . . . [To do otherwise] would entail a prohibitive cost. . . .

This is a fair statement but it should have been made more of as a major premise, and more carefully expounded. The value of a

public accountant to a business enterprise, its owners, and the public generally, needs to be emphasized from the point of view that in a vast majority of cases he has succeeded in providing useful information that would not otherwise be furnished, raising constantly and quietly, but nonetheless certainly, the level of honesty and fair practice in business, and acting, potentially at least, as an umpire between business and government and business and the public. As long as he is employed by business, the accountant can, however, only guide business in what must seem to others to be slow, evolutionary channels.

A third section of the pamphlet relates to the appointment of auditors. Some accountants have urged that the English system of appointment by stockholders be adopted, notwithstanding the legal control of stockholders' meetings in the great bulk of American corporations by the corporate managements. The responsibility of the accountant would be increased, it was felt, by causing him to address a larger, more objective audience. The pamphlet wisely eschews this pitfall; it recommends that appointments be made by boards of directors, doubtless in recognition of the impetus that has been given in recent years to the choosing of board members who are responsible rather than decorative, and who feel it their duty to institute and enforce corporate policies.

In suggesting the form of audit report (the word "certificate" ought to be forgotten, says the Committee), the pamphlet is on less firm ground. The pamphlet's realism is admirable—as far as it goes. It suggests timidly that "the auditor may prefer" to say "that the accounting records (instead of the financial statements) have been examined," but it is apparently too much to expect the Committee to return to the good, old-fashioned term, *audit*.¹¹ The Committee has also been

bold enough to recommend the omission of such meaningless phrases as "obtained information and explanations from officers and employees of the company," "but we did not make a detailed audit of the transactions," "subject to," and "based upon such examination"; yet it is possible that the Committee's new language may shortly prove as empty and unsatisfactory as the old which, it should not be forgotten, was devised only a few years ago.

The first paragraph of the new "report" consists of a single sentence and deals with scope; it reads—

We have examined the balance sheet of the XYZ Company as of April 30, 1939, and the statements of income and surplus for the fiscal year then ended, have reviewed the system of internal control and the accounting procedures of the company, and have examined or tested accounting records of the company and other supporting evidence, by methods and to the extent we deemed appropriate.

Like many another ambitious attempt to secure *multum in parvo*, the phrasing, heavy and awkward, is as objectionable on the whole as that which it replaced. The sentence starts with the incorrect and misleading statement, "We have examined the balance sheet . . ." although, as stated, the Committee would permit the substitution of "accounting records" for "balance sheet." In practice, the auditor starts with the books and winds up with the financial statements which he prepares or in the preparation of which he participates and assumes substantial responsibility. Why should this simple fact not be readily admitted?

the former expressions "audit," "balance-sheet audit," and "certificate," respectively, with no announced change in meaning, is a striking example of word-substitution having the ostensible objective of eliminating confusion but actually leading to new involvements in interpretation because (1) no definitions are attached to the new terms, and (2) the new terms have other meanings which give no promise of less disturbing associative inferences. The interpretative embarrassment will be apparent as soon as the new certificate has been given extensive use.

¹¹ The use by the Committee of "examination," "examination of financial statements," and "report" for

In the answer to this question lies the real objective of the language. The goal sought is not the information for the reader but the protection of the accountant. What nonaccountant reader can possibly be any wiser after having read this first paragraph? There are three claims in this paragraph: an examination has been made, internal controls have been studied, and the tests applied have been of the auditor's own devising—or are the last nine words intended to have application to the whole paragraph? Really it doesn't make much difference: so little is said. To assert that the audit scope has been defined in this paragraph is a statement belonging to the field of accounting mythology.

The second paragraph reads:

In our opinion, the accompanying balance sheet and related statements of income and surplus present fairly the position of the XYZ Company at April 30, 1939, and the results of its operations for the fiscal year, and conforms to generally accepted accounting principles applied on a basis consistent with the preceding year.

Again: who cares? Why not include other positive statements—that the books were found to be [not] in balance or that the auditor's suggestions as to adjustments were adopted [or rejected]? If the paragraph is reproduced in its present form, there being no exceptions, no information is being conveyed to the reader. Who knows the meaning of "generally accepted principles?" Almost anything goes with some accountants, and the phrase as yet, without a statement of principles, may give the reader an unwarranted assurance. The Committee could have been of more help to practitioners if it had suggested language for exceptions.

WHAT OF THE FUTURE?

Some day it will be recognized that the audit certificate, or short form of report, is wholly without merit, even as protection to the accountant. As modified it is still mumbo-jumbo, except for any inserted qualifications, to management, directors, stockholders or other readers. The Committee failed to see that it was the *idea* of the report that was at fault, not the words of which it was composed.

Protection to the accountant cannot be secured by two sentences consisting of words which can hardly escape having technical twists. He knows that many of his readers whose investment acts are going to be premised at least in part by the financial statements he has signed cannot possibly appreciate why in the first paragraph he has omitted the definite article before "accounting records," why he claims that in his examination he has employed what he conceives to be appropriate methods in appropriate amounts, and why he continues to address his report to the directors, knowing that a much larger audience than the directors is supposed to rely on it. The auditor who uses the new form may be actually exposing himself to unexpected attacks. Not only have the principles not been defined which he says the company has followed, but because specific mention is made of certain things the inference is strong that everything else not directly referred to in the report is in fine shape. Where will this sort of reasoning lead certain ingenious persons who have previously attacked accountant's findings?

The material contained in the three "research" bulletins will be discussed in the December issue of the REVIEW.

BOOK REVIEWS

Introduction to Business. Second Edition. Edwin H. Spenger and Jacob Klein. (New York: McGraw-Hill Company, Inc., 1939, pp. xvi, 786. \$4.00.)

Introduction to Business, as stated by the authors in the Preface, was written primarily "to acquaint the reader with the organization, methods, and problems of American industries." The authors have succeeded admirably in presenting the subject in a clear and readable manner. Their style is especially interesting, and difficult phases of the subject have been so written that immature students will be able to read without struggling. Whether this is a virtue is debatable.

The text is rather general in nature and covers practically every aspect of business in a more or less detailed fashion. It is somewhat difficult at times to be able to differentiate fundamentals, procedures, practices, and methods. In fact, the book attempts to cover so much that there is a danger that student readers may divide themselves into two groups. One group may get the opinion that business principles, after all, are rather easily mastered, while the other group, more thoughtful, may arrive at the conclusion that a mastery of all the ramifications of industry is almost impossible of attainment. Either conclusion is, of course, injurious to the progress of students. A book achieves its purpose best when it gives to students a well-proportioned perspective.

The book is divided into nine parts as follows:

- I. Launching the Enterprise, six chapters.
- II. Managerial Control Policies and Problems, five chapters.
- III. Labor Relations and Problems, five chapters.
- IV. Marketing Methods and Problems, six chapters.
- V. Price Factors and Pricing Problems, five chapters.
- VI. Financing Methods and Problems, four chapters.
- VII. Tax Calculations and Problems, three chapters.
- VIII. Problems of Risk, Bankruptcy and Readjustment, three chapters.
- IX. Consolidation and Coordination, three chapters.

Parts II and V stand out as the most interestingly and instructively written.

In the opinion of this reviewer, the introduction of highly technical points of related subjects into a good general treatise may tend to weaken rather than strengthen its merits. Examples of these are the introduction of the theory of debit and credit and ratios in Chapter V under the Investment of Capital Funds. Chapter VIII, Quantitative Guides to Management, attempts to present the principles of index numbers and time series. But the authors wisely refrained from pushing their discussion of correlation too far.

Mere mention of topics adds very little to a book. Under Analysis of Financial Statements in Chapter XXIX more could have been said without delving into

technicalities. Installment Sales in Chapter XXXI could have received a more adequate treatment, especially their effect on the determination of profit. Budgets have been mentioned in connection with governmental bodies but there seems to be no statement of budgetary control of business. In a general book on business it is a rather serious omission. Legal aspects of business could have been emphasized more strongly.

In conclusion, however, it should be said that it certainly is not a simple task to decide what to include and what to exclude and how far the treatment of each topic should be extended on such a broad subject as business.

And this text should, on the whole, prove to be a reasonably serviceable one.

ALFRED D'ALESSANDRO

College of Business Administration
Northeastern University

Auditing—Theory and Procedure. J. F. Sherwood and Roy T. Culey. (New York: South-Western Publishing Company, 1939, pp. 469.)

The author's preface in itself is a good review of the book. The idea of correlating accounting and audit theory with practical audit procedure, while not altogether new, is a desirable departure from some of the older texts which stressed theory and contained little, if any, audit procedure.

From a pedagogical point of view, in the reviewer's opinion, the text is sound. It contains a fully developed illustrative audit for a typical business. The importance of working papers—analyses, confirmations, certifications, indexing, and the like—is properly stressed, and many worthwhile models are provided. Accompanying the illustrative audit is an audit case affording the student the opportunity of applying practically what may have been learned from a study of the illustrated audit, and from the discussions of audit theory and procedure presented in the text. In addition the text is well supplied with questions and problems. And there are two additional audit projects, one fully illustrated, the other supplying data from which the student is required to prepare work papers and prepare an audit report.

Although this review has been largely descriptive, it is intended to suggest that the book undoubtedly will make an appeal to auditing instructors because of the mass of practice material that it contains.

Several matters of a perhaps minor importance by way of criticism should be mentioned. The reviewer does not believe that an audit report should contain system suggestions. A system report, of course, may accompany an audit report, but it is extra work and should entitle the accountant to an extra fee. Defective system procedure would usually only be referred to in an audit report by way of qualification. The illustrative audit report might be more easily read if it contained more tabulations. In some respects, report writing is a matter of opinion. The reviewer personally has long since avoided signing reports "respectfully" and his

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experience has shown that in most quarters concluding paragraphs of appreciation and the like should be avoided.

Other matters could be mentioned, but on the whole it is the reviewer's opinion that the book has been well written; that it will serve a useful purpose; and that it will have a wide appeal.

HENRY J. BORNHOFFT

Boston University

Social Security Taxation and Records. Calvin E. Fawcett and Daniel A. Wilcox. (New York: Prentice-Hall, Inc., 1939, pp. xxi, 649. \$7.50.)

This volume is a manual of procedures for social security accounting. The procedures outlined are primarily based on the Federal legislation in this field. Some attention is given to state requirements, but, as the authors point out, the state requirements are not uniform and are constantly changing; hence, the emphasis on the Federal requirements.

The scope of this volume can be indicated by an enumeration of the topics discussed. There are two chapters on background material; three chapters on required records and reports; one chapter on sources of information needed by the employer; one excellent chapter on social security accounting; one chapter each on merit rating, reserve accounts, benefits, claims, employers and employment, wages, and penalties; and one long and very detailed chapter on systems designed for social security accounting. Some forty systems are described and illustrated.

This volume will not solve all the problems that plague accountants and employers but it will solve many of the problems arising through misinterpretation of the various pieces of legislation here discussed. The discussions of the Federal legislation are definite and clear. The legislation is dissected, the relationships of the parts demonstrated, and important parts of the laws emphasized. The discussions of the state laws are necessarily more general, although definite references and illustrations are used. The person interested in state social security problems would find much of interest in this work although it will not bear specifically on the problems arising under a particular state law.

There is little in this work of a theoretical nature. Such problems as the best means of financing social security payments, or the financial implications of governmental reserves, are not discussed. This book treats of accounting procedures in this specialized field and it is an excellent treatment.

FRANK P. SMITH

University of Rochester

Papers on Accounting Principles and Procedure Presented at Fifty-first Annual Meeting of The American Institute of Accountants. (New York: The American Institute of Accountants, 1939, pp. vii, 252. \$1.00.)

This collection includes 56 papers and remarks classified into 10 major divisions. Thus a wide range of subjects of interest to teachers and practitioners of accounting is covered.

The title indicates that discussions of both principles and procedures are included. Actually less than one-third of the discussions deal with principles. Some of the remaining papers touch on principles but are chiefly concerned with specific topics of procedure.

The papers presented which consider "A Statement of Accounting Principles" and "Relationships between Legal and Accounting Concepts" will probably be of most interest to teachers. The statement of accounting principles which was the basis of discussion for the first ten papers is the statement prepared by Messrs. Sanders, Hatfield, and Moore. The discussions of this statement can be classified into two groups: those speakers who supported the expressed opinions of Messrs. Sanders, Hatfield, and Moore, and those who took issue with the published report. Included in the latter group are excellent papers by Chamberlain, Paton, and Nissley.

The papers presented which deal with procedures include discussions of such topics as building-and-loan accounting and machine accounting, as well as other topics of a more general nature such as the problems arising under the Social Security Act. The list of speakers included representatives of governmental agencies and industry as well as accountants.

The papers included in this volume are all short and represent various degrees of condensation. Some of the papers indicate that the speakers said all they had to say on their particular topics and perhaps padded a bit to stretch their contributions to three pages per speaker. Other speakers presented highly condensed discussions which would be more illuminating if expanded.

The papers grouped under each major heading are not comprehensive but rather touch on certain specific points. The collection of papers thus includes a large number of short discussions of separate topics, an imposing number of ideas, some excellent individual discussions of important subjects, and a few duds. The opinion is expressed in the foreword that these papers "should be of lasting interest to accounting practitioners and students of accounting." We do not share the editor's optimism but this collection of papers is well worth reading.

FRANK P. SMITH

The University of Rochester

Business Mathematics. I. L. Miller and C. H. Richardson. (New York: D. Van Nostrand Company, Inc., 1939, pp. xii, 352.)

The book begins with a review of elementary algebra, and then discusses in some detail linear and quadratic equations, the index laws, the binomial theorem, logarithms and progressions. More than one-quarter of the book is devoted to these preliminary mathematical matters. Subsequent chapters deal with commercial applications of percentage, simple and compound interest and discount, annuities certain, sinking funds and amortization, depreciation, and bonds. Rather more than the last fifth of the text is devoted to probability and the elementary theory of life insurance. Tables of logarithms, compound interest, annuities and some insurance tables are bound into the book.

The number of examples is large, new points often

being illustrated by as many as three. Many of the examples are worked out in great detail. A large number of graded exercises is provided, and sets of review problems. The explanations are clear and detailed, especially in the first applications. The remarks on the accuracy obtainable with the tables, the frequent checks and the consistent use of line diagrams in interest and annuity problems are among the good features of the book.

A. S. GALBRAITH

University of Rochester

Solutions for Advanced Accounting Problems. E. L. Kohler. (New York: Prentice-Hall, Inc., 1939, 435 pp. \$3.00.)

Since Kohler's "Advanced Accounting Problems" was reviewed in the June, 1939, issue of the *ACCOUNTING REVIEW*, a volume of solutions to these problems has appeared. It contains 435 large pages devoted to the 134 problems. The material is in loose-leaf form and is clearly and neatly produced.

ARTHUR W. HANSON

*Harvard University
Graduate School of Business Administration*

Cost Accounting, Principles and Procedures. Charles H. Langer. (Chicago: Walton Publishing Company, 1939, 334 pp., size 8 $\frac{1}{2}$ x 11.)

It is generally agreed that cost accounting is a most difficult subject to teach. It follows inevitably that it is most difficult to write a cost accounting text which will satisfy teachers of the subject, especially since there are two schools of thought as to the function of a cost accounting course. One of these schools believes that students should be made proficient in the handling and recording of all sorts of detailed technique of cost accounting, i.e., students should be trained to make good cost clerks, while the other school holds that students should have very little if anything to do with the learning of technical and routine transactions, the knowledge of which is acquired more quickly and better on the job. The first stresses the art, while the latter stresses the science of cost accounting. It is, therefore, practically impossible to satisfy the expectations of everyone in one volume. Mr. Langer seems to have taken somewhat of a middle course and has succeeded reasonably well in his task.

The author states in the preface that "the objective of this work on cost accounting is to treat of the principles and procedure of factory cost accounting and their application in the installation and operation of a modern cost system." The "principles" could have been emphasized more forcibly. It is often difficult to realize whether the author is discussing a principle, a procedure, a practice, or a rule. As the teaching and accounting professions are today in search of clear and fine distinctions between principles and rules, we should all attempt to help in such an arduous quest.

The treatment of "the installation and operation of a modern cost system" has been left out entirely, unless the reader is expected to visualize things which are not stated—too much to expect, especially from students.

In fact, the term "cost systems" has been used as synonymous with "cost methods" in Lecture 2, Section 6, and frequently thereafter. From the reviewer's viewpoint, a cost system is much more inclusive than a cost method, which may be a part of a system, while a system can never be a part of a method. It is also stated that a cost unit may be a class of product. If this class of product includes units which sell for \$75, \$1.00, and \$1.25, an average cost of \$.60 would be meaningless. The imputation of weights, arbitrary or proportionate to sales prices, will carry us into the realm of joint-cost principles.

The text contains thirty-two lectures, although the author prefers to say thirty lectures and two special lectures. Lecture 24 deals with joint costs and by-product cost; Special Lecture 24 treats of depreciation; and Lecture 30 discusses graphic methods; while Special Lecture 30 considers some phases of the Social Security Laws. It would be interesting and informative to know the relation which exists between them.

Thirteen lectures are devoted to general conceptions of costs and the fundamental principles of accounting for the elements of costs. Process cost is discussed in Lectures 14 and 15. The subject here is treated carefully and rather clearly. However, too much detail is presented in the Cost Statements. Subsidiary schedules should be prepared and calculations certainly should be omitted from summary statements. It is somewhat difficult to see any useful information derived where several products emerge from a single process. In the reviewer's opinion, the cost of normal and unavoidable spoilage should be applied both to the inventory in process and the product transferred to the following process rather than transferring the entire spoilage cost to the next process. The burden of inevitable expenses or losses should fall where it originates.

Three lectures are devoted to the collection, allocation, and distribution of manufacturing expenses. Service departments which serve each other seem to have received the most careful attention. Simultaneous equations and successive trial method are illustrated as though they were common tools of distribution. Yet in discussing depreciation methods, we are reminded of the advisability of not using "fine-spun theories requiring the use of higher mathematics."

Standard costs are covered in four lectures. The most satisfactorily treated topic of the text, it should receive the practical approval of any reader interested in standard costs. Variance analyses could, however, have been carried further. The analysis of manufacturing expenses in totals only has very little managerial information; it should be subdivided into at least the controllable and non-controllable groups. Perhaps variation statements should be prepared showing dollar, price, and volume variations rather than price and volume. "Volume" as here used comprises efficiency and quantity variation.

A more complete exposition might have been accorded joint costs, by-products, budgetary control, and more especially cost control accounts which are discussed in a lecture devoted chiefly to interest on investment.

Exercise materials seem to be rather inadequate. A good number of the lectures contain only questions and no lecture includes more than two problems. Of course, if the practice sets which cover some fifty pages are used, there will be enough practice work, but the practice sets and some of the problems involve chiefly routine exercise because of the minute explanations given therein.

ALFRED D'ALESSANDRO

College of Business Administration
Northeastern University

Social Research. Manuel C. Elmer. (New York: Prentice-Hall, Inc., 1939, pp. xvi, 522. \$3.00.)

This is a volume written by a sociologist for sociologists, but despite the use of technical materials relating to this field, much of this volume should be of interest to any one attempting research in any of the branches of the social sciences. The whole volume can be profitably studied by economists since economists as a group know too little of the techniques involved in the study of such matters as life histories, vital statistics, regional surveys, the measurement of social values, and the analysis of attitudes, and are unable to appreciate the importance of research data bearing on such matters. Of particular interest are chapters 1-6, 10, 16, 19, and 23. The subject matter of chapters 10, 16 and 19 is statistical in nature, and chapter 23 is concerned with the development of objective methods of research. These chapters are well written but are rather general and the material is not new. However, the sober warnings against the improper use of statistics and the methodology outlined are well worth reading.

The first six chapters go to the heart of research in the social sciences. Much of the material discussed in these chapters is, of course, sociological in nature, and the terminology is that of sociology. Nevertheless, the basic problems of research in this field are much the same as the problems encountered in other fields such as economics, and the discussions included in this part of the volume bear on all phases of the social sciences. These chapters include discussions of such important points as objectives of and trends in research, types of social research with emphasis on the general methodological approach, the establishment of a research project, historical research, and research and culture.

It is difficult to appraise the merits of technical discussions in fields other than one's own. This is particularly but regrettably true of the social sciences and consequently no attempt will be made to evaluate the strictly sociological parts of this work. The parts of this work which deal with social sciences as a whole are excellent. The style of this writer is good and there are extensive bibliographies. This whole volume bears evidence of careful, scholarly effort and should prove stimulating to any research worker in the social sciences.

FRANK P. SMITH

University of Rochester

Expenses and Profits of Limited Price Variety Chains in 1938. Stanley F. Teele. (Boston: Harvard Graduate

School of Business Administration, 1939, pp. 30. Tables 22. \$1.00.)

The limited price variety chain is no longer immune from the adverse economic conditions which have affected its competitors. This fact is probably the outstanding contribution of Professor Teele's bulletin on the operating results of variety chains in 1938. The variety chains came through the severe depression of 1931-1933 in far better condition than department stores. In the recent reverses of 1937-1938 the profit rate for variety chains dropped below the profit level of 1931. Net profit in 1931 averaged 2.77%. In 1938 net profits declined from 4.11% in 1937 and 5.05% in 1936 to 2.38%. This decline carried the net profit rate below that of any year in the last decade except 1932.

Much of the explanation for the adverse effects of the recent depression is found in the growth of variety chains to a state of maturity. No longer can the variety chains offset declining sales per store by opening new stores and exploiting new markets. Like the department store, the variety chain must meet poor business conditions by effective managerial strategies within existing stores.

Like department stores, the variety chain is facing a strong trend of rising operating costs. In 1938 the total expense rate for fifteen identical chains reached a new high level of 32.18% exceeding the previous high level of 1933 by 0.49%. Meanwhile gross margin in 1938 declined to 34.56%, approximately 0.6% less than in 1937.

The increase in total expenses was caused by increased tenancy and related costs, increased taxes, and to a less extent by an increase in payroll cost. A partial explanation of the increase in expense in 1938 is found in a decline in net sales per store of 5.5% below 1937. Like department store managers, the managers of variety chains were not able to keep expenses in line with declining sales.

Professor Teele in his analysis seeks the causes of these conditions. "Maturity" is a general explanation but more specific causes of the percentage changes may be found. The decline of gross margin may be directly explained as a result of efforts to reduce inventories to match the lower level of sales. Mark-downs which should have been taken in 1937 were not taken until 1938. The fact that mark-downs were necessary and were not taken promptly finds a parallel in the department store field and indicates that variety chains are becoming more susceptible to the economic diseases of department stores.

The detailed increases in expenses are not entirely explained. Considerable analysis is given to the productivity of employees and, in general, the chains with the largest sales per employee-hour have the lowest salary and wage expense. But salary and wage expense is only approximately half of total expense and the relationship between sales per employee-hour and total expense although positive is not a close correlation. The increase in tenancy cost leads to the conclusion that "the factors making for rising dollar real estate costs remained at work in 1938. . . . The increase in this percentage was not solely the result of a decline in

sales, for there was an increase in dollar expenditures for occupancy." Taxes in 1938 continued to rise and in comparison with sales have increased four times as fast since 1929.

Although the picture of the operation of variety chains is rather dark for 1938, the chains, in comparison with department stores, did very well. Whereas the department store had a net loss of 0.4% and a net gain of only 2.35%, the variety chain group earned a net profit of 2.38% and a total net gain of 5.64%. The variety chains can still lose considerable ground before their profits come down to the department store level.

Although variety chains have reached or are approaching a state of maturity, the reviewer does not expect variety chains to continue a trend of decreasing profits in the immediate future. Governmental activities of leveling incomes and of increasing the buying power of the low income groups benefit variety chains and other stores selling the low income groups far more than the department stores who sell to the higher income groups. Moreover, variety chains with their selling emphasis on impulse merchandise have not been subjected to as severe price competition as most stores which sell specialty and shopping merchandise. It will be interesting to see in succeeding bulletins whether variety chains have actually reached a state of maturity with severe competition and low profits or have suffered merely from a passing phase in our business cycle and will again take their place as an outstandingly profitable type of retail institution.

E. H. GAULT

University of Michigan

Operating Results of Department and Specialty Stores in 1938. Malcolm P. McNair. (Boston: Harvard University, Graduate School of Business Administration, 1939, pp. 30, Tables 19, §2.50.)

This is the most recent of the series of bulletins on department stores by the Bureau of Business Research of the Harvard Business School. Like its predecessors, it is replete with tables analyzing the operating results in great detail. Among the important tables are: (1) Goal Figures for Merchandising Operations and Profits, (2) Goal Figures for Expenses by Natural Divisions and for Productivity of Space and Personnel, (3) Detailed Expenses by Natural and Functional Divisions, and (4) Goal Figures for Expenses by Functional Divisions. With these tables at hand it is possible for the individual store operator to compare almost any statistics or percentages which he may have with comparable statistics from other stores.

The use of the Harvard statistics is limited by the fact that they are statistics for total store only, the composite of detailed and sometimes conflicting statistics whose identities are lost in the total figures. They are valuable in showing trends in department store operation but they are not sufficiently specific to meet the day-to-day problems of store operation.

The Harvard Bulletin reports operating results as measured by net profit as 33% below 1936, and 20% below 1937. For the first time since 1934 no profit was shown if allowance is made for interest on the capital

used. In comparison to 1937 gross margin in 1938 remained the same but total expense jumped 1.5% of sales, largely because of a decline in volume of net sales. Specialty stores which are also considered in the Bulletin had practically the same experience as department stores.

Professor McNair gives a masterly and concise theoretical analysis of the troubles of department stores during the past ten years. He finds in the movement of department stores sales, stocks and prices, 1929-1938 the immediate cause of changes in margins, expenses and earnings. But the relationship existing among sales, stocks, and prices is not clear. Professor McNair gives his present opinions as follows:

"1. A sustained and definitely noticeable rise in retail prices is likely to result eventually in some curtailment of 'real' sales. The healthiest increases in sales volume are those obtained during periods of retail price stability.

"2. Although in earlier periods it is probable that 'real' sales tended to follow rather than precede the Index of Industrial Production, this relationship may not now hold good. The spending program of the present Administration, its professed purpose to make consumer buying the foundation of the industrial structure, and the current reluctance of private capital to seek venturesome employment, have indeed gone some distance toward transforming our economy into one whose cyclical fluctuations are governed largely by changes in the sale and production of consumers' goods. As a consequence, changes in the 'real' sales of department stores now probably tend to precede changes in industrial production.

"3. The movements of 'real' stocks in department stores are probably a result rather than a cause. Nevertheless, a period such as most of 1934, 1935, and the first half of 1936, when 'real' stocks were held at a constant low level in spite of increasing 'real' sales, is a healthier period for business than one in which inventory accumulation takes place."

A considerable discussion is given to the question, "How Shall the Rising Trend of Department Store Costs Be Interpreted?" In addition to the usual explanation of higher taxes, higher wages, and decreased working hours, which are merely mentioned, an explanation is offered which has received little consideration. After indicating that the economies of large-scale production are in part offset by increased costs in marketing, the author turns to some merchandising characteristics of small and large-scale retailing with the following explanation:

"At the same time we have experienced a growth in large-scale retail business which is functionally different from small retailing. In the case of the small retail enterprise, the vendors, whether manufacturers or wholesalers, characteristically come to the store; they may even furnish the advertising, dress the windows, and supervise the stock. But the large retail enterprise typically goes to the vendors, as a rule directly to the manufacturers. For many lines of merchandise it has its own brands, it lays down specifications, it not infrequently may undertake functions of styling and design.

Thus, many of the manufacturer's marketing functions have been taken over by large retailers. When the manufacturer goes to the store, the cost of certain marketing functions is the manufacturer's selling expense and consequently appears as part of the cost of goods to the retailer; whereas, when the store comes to the manufacturer, the cost of the equivalent marketing functions appears as part of the store's operating expense."

The reviewer recommends the Bulletin both to retail store executives and those interested in the theoretical aspects of the economics of retailing.

E. H. GAULT

University of Michigan

Financial Statement Analysis: Principles and Technique.

John N. Meyer. (New York: Published by the Author, pp. x, 270. 1939.)

This work should not only supply the student with material for a satisfactory laboratory course in the analysis of financial statements, but it should also serve as a handy reference book for all practical accountants who desire to improve their manner of statement presentation.

The author traces the evolution of financial statements and analyses, and covers a wide range in his exhibits of modern techniques of encompassing the development of ratio analysis, trend percentages, and standard ratios. Common defects in accepted forms of financial statements are pointed out, the most outstanding of which he classifies into defects in form, terminology and valuation.

The first step in the analyst's work involves scrutinizing the concern's financial statements in order to discover shortcomings and deficiencies in information. (The analyst should not hesitate to recast these statements when necessary.) It is easy to agree, for example, that sufficient allocation of depreciation to the divisions of operations, sales, and administration is often lacking in the statement of profit and loss. In the past this has been one of the neglects of utility presentation.

It is stated that the analyst should ignore intangibles entirely, classify assets as current only when it is the intention of the business to convert them into cash to pay debts, and consider investments as non-current unless fully explained to justify a current position.

The author is in sympathy with the method advocated by some accountants of substituting the terms "allowance" for valuation reserves such as bad debts, and "provision" for current liability reserves such as Federal and State taxes. This leaves the term "reserve" applying only to earmarkings of surplus.

Briefly, the first three of the ten chapters comprising the book embody: (1) an outline of the development of analysis technique, (2) an exposition of the nature and limitations of financial statements, and (3) an outline of common defects in contemporary statements.

Chapters four to seven inclusive display methods of applying the common complementary measurements of dollars and percentages to "Horizontal" (moving) and "Vertical" (as at a specific time) conditions.

Chapter four presents an analysis of two successive balance sheets and among others, the following state-

ments: (1) Comparative balance sheet, (2) statement of application of funds and its related working sheet, (3) condensed profit-and-loss statement and, (4) surplus statement. The reviewer believes that the statements are too elementary for the accountant who likes something more stimulating. The author suggests the need for a more extensive use of the "statement of application of funds" and the adoption of it as standard accounting procedure. Even with public accountants there has been a failure to utilize sufficiently this easily understood statement.

Chapter five presents an analysis of two successive profit-and-loss statements. Along with other interesting exhibits are: (1) a comparative profit-and-loss statement showing percentages of increases and decreases and (2) a statement accounting for variation in gross profit which shows how much (in dollars amount) the variation in sales and cost of goods sold was due to change in commodity volume and how much to changes in price.

Chapter six presents an analysis of a series of statements and stresses, particularly the trend (horizontal) ratios which bring out sharply information pertaining to rates of change. It is admitted that the trend ratio of one item to be significant must be studied with reference to other facts. Recommended graphic representation of trends are shown, significant facts are pointed out, and proper interpretations explained.

Chapter seven presents an analysis of financial structure, structural equations, relation of the equities, etc. The author demonstrates some of the important relationships which analysts usually test: Net worth to liabilities, net worth to non-current assets, current assets to current liabilities, working capital to current liabilities, quick assets to current liabilities, sales to inventory, cost of goods sold to average inventory, and sales to receivables. The author points out other comparisons between statement items; he believes that the analyst should feel free to make comparisons between any items as long as he is certain that there exists a relationship the measurement of which has significance.

Chapters eight to ten inclusive deal with the interpretation of the measurements, structural standards, and sundry measuring devices. As the author states, "Use should be made of external data by the analyst such as (1) information relating to general business conditions and (2) information regarding conditions in the particular industry" (p. 129). Various points at which weaknesses in financial statements most commonly occur are shown. Measurements covering receivables, their turnover based on collections, inventories, velocity of inventories, gross profit test of inventories, measurement of fixed assets relative to capitalization, variations in net worth, etc. are also included.

It is claimed that the analyst generally interprets structural ratios in the light of standards formed through personal experiences, not, however, to the exclusion of standards set by research. To be valid, ratio standards must be predicated on homogeneous grouping of the enterprises, uniformity of the data, and reliability of the averages; further, ratios of enterprises may be affected by location, size, clientele, type of operation and

type of product. The extreme difficulty of arriving at standard ratios for industries is emphasized and the innumerable factors to be considered casts a shadow of skepticism on standard ratio work. In this regard there seems to be room for much further work as better statements are rendered.

In conclusion, the reviewer would like to mention that there are some very good questions in theory at the end of each chapter and, in addition, Appendix A presents some financial statement forms approved by various technical associations. Appendix B presents laboratory problems to be assigned with the various chapters. These appear interesting and give a working application of the theory studied.

SHELDON W. McGRAW

Tennessee Valley Authority

The LaSalle Manual of Federal Income Tax Procedure. (Chicago: LaSalle University Press, 1939. Pp. iv, 264.)

Prentice-Hall Tax Diary and Manual for 1939. (New York: Prentice-Hall, Inc., 1938. Pp. 380 and 475. \$6.00.)

The 1939 edition of *The LaSalle Manual of Federal Income Tax Procedure* contains changes made necessary by the Revenue Act of 1938 and presents again a very satisfactory introduction to Federal income-tax procedure. In addition to the necessary revisions because of new legislation, several sections have been rewritten and the sequence of chapters somewhat revised. Installment sales, for example, are treated after the general discussion of income and deductions instead of being injected into the middle of the broader problems of income determination, as in the 1938 edition. A new chapter on "Minimizing Income Taxes" gives a good introduction to the manner in which a taxpayer's selection of one among alternative methods of handling his affairs will influence his tax liability.

Reproductions of income tax forms are useful in the chapters describing and illustrating the methods of preparing completed returns. In the 1938 edition the different items were referred to by numbers corresponding to those on the Treasury forms. The instructions accompanying the problems for solution by students suggest references to the income tax regulations with which the students are supposed to supply themselves. The text of the course wisely quotes liberally from the law and the regulations. Students are accordingly given an opportunity to develop a working familiarity with the primary sources with which they will have to deal in tax matters.

The Prentice-Hall Tax Diary and Manual for 1939 presents, in its first 380 pages, a summary statement of state individual income taxes, state corporation taxes, and the Federal income, gift, estate, and miscellaneous taxes. In the later pages, information is given for each day in 1939 on reports and returns due under the state and Federal tax laws previously described, and, in addition, certain other state laws dealing with particular industries.

While the *Diary and Manual* is designed to give a working schedule for tax returns and reports in an

endeavour to assure compliance with all laws and regulations, students will find the book beneficial in two respects: Reference to it will not only give an introduction to a type of material used in tax practice, but the book itself will also serve as a convenient source of information on tax law. The collection in one place of the various current state corporation tax laws is particularly useful for the tax economist and student.

DAN THROOP SMITH

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Graduate School of Business Administration

Accounting for Economic Management. D. S. Blacklock. (Glasgow: Jackson, Son & Company, 1938, pp. ix, 128. 8s. 6d.)

This book is not designed for the student. Instead, Mr. Blacklock says, its great parsimony of exposition makes it a book for the qualified manager and accountant.

It is unfortunate that the author did not exercise a different judgment in determining the contents of his book. He could have reduced its coverage considerably, made a more compact volume, and succeeded in being a little less sketchy at important points (e.g., in the development of his "differential-costing" equations on pages 42, 43 and 44). But his objective was to write an encyclopedia in 128 pages, beginning with something approaching an essay on epistemology and ending with remarks on socialism. As one might suspect, his analyses rarely get beyond the initial stage and his solutions to the problems he poses are reduced, at least to the reader on this side of the Atlantic, to the "catchword" level.

The book begins with two chapters on Industrial Organization and Administration. Chapter I deals with a theory of knowledge and the virtues of classifying things known. In industrial operations three major types of classification are found valuable by the author: (1) classification of product (i.e., the products of a business are numbered in such a way that articles possessing common characteristics are grouped together); (2) classification of cost (variable material cost; variable labor cost; and "oncost," variable and fixed); and (3) classification by function. Chapter II, a development of the third item, is entitled "The General Functions of Industrial Departments"; it is an attempt to lay down some general principles of industrial organization. If this chapter is read at all, the curious organization chart on pages 14 and 15 should be ignored. The chart itself fails to distinguish between line and staff functions, although this distinction is the main emphasis of the chapter. Neither of the first two chapters contributes anything significant to the development of the author's thesis. If he had substituted instead a few references to the works of Mooney and Reiley, Gulick, or Urwick he would at least have furnished the interested reader with more informative guides to the problems of organization.

Chapter III (five pages) on "The [historical] Development of Accounting" needs no comment. It is a wholly inadequate treatment of the subject.

Chapter IV, "Differential Costing"; Chapter V, "Forms, Cards and Lists"; Chapter VI, "Differential

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Analysis of Oncost"; and Chapter VII, "Differential Costing—Conclusion" constitute the bulk of the book. The reader should be warned that Mr. Blacklock is using the term "differential-costing" in a sense very different from its ordinary meaning. In America, at least, the term is ordinarily used to describe some sort of approximation to marginal-cost analysis. Mr. Blacklock, however, uses it to describe an analysis of variations from standard, historical, or any other costs. "Differential-Costing" as he uses the term consists of:

- "(1) The analysis of actual costs incurred during a period, on the basis of the normal standard costs that would be incurred in certain hypothetical and predetermined conditions, and the extra costs or savings attributable to variations from these conditions.
- "(2) The reconciliation between normal or standard costs and actual costs by means of evaluating the extra costs or savings, attributable to differences in the data on which the standard costs were computed." (pp. 39-40).

He divides his analysis into three parts: price variations, quantity variations, and "divergencies." Where "high-priced materials have increased relatively to the low-priced materials the average price of the compound will be increased"; "divergency variation" is an attempt to analyze these changes in proportions.

The "qualified manager or accountant" will probably obtain everything of value that the book contains if he studies carefully the equations and charts on pages 40-46. Although Chapter VIII, "Analysis of Profit Variation," gives some promise of pioneering in the field of marginal-revenue analysis which has already been approached by Joan Robinson and T. O. Yntema, it digresses into a four-page announcement of a card-to-list duplicating machine which is apparently a combination of a punched-card tabulator and the McBee, or Keysort, card. The desired information is typed on the

face of the card with a hectograph typewriter ribbon. The cards are punched and then sorted by inserting a needle through the proper holes, after which they are attached to a carrier and the hectographed record is transferred by printing to a suitable space on one of a series of folded and printed forms.

In addition to the heterogeneous and sketchy treatment of subject matter, the reader will find himself annoyed by the irrelevant asides contained in nearly every chapter. For example, on pages 50-52, Mr. Blacklock discusses "Labor's Share of Cost Variations" and embarks on a discourse on the proper methods of remunerating labor without disclosing any precise procedure as to the accountant's determination of labor's portion of the variations. And on page 91 he gives a detailed description of the hectograph reproducing process, presumably for the information of the "qualified manager or accountant." The American reader will also have to contend with a variety of unfamiliar terms which the author does not define, but which, it is hoped, are known to his English cousins.

The final chapter (Chapter IX), "Some Economic Opinions," is evidently intended to be an essay on the ills of our economic system and their possible cures. The gist of Mr. Blacklock's suggestions is that the state should subsidize wages out of profits whenever unemployment appears. In this manner he envisages that a wedding of socialism and capitalism will occur whereby the major advantages of each will be retained. In addition, there are four paragraphs on "Money and Public Finance," two paragraphs on "Training for Politics," and three more on "Mechanization," the last-named raising questions relating to men and machines, individuality and the creative spirit, the perils of war, and other matters conceived by the author as having at least passing interest to his readers.

WILLIAM COOPER

Tennessee Valley Authority

UNIVERSITY NOTES

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Revision of "Accounting Principles" by McKinsey and Noble will be completed this summer and will be ready for use in the Fall. Preparations are being made to apply for a charter to establish a Beta Alpha Psi chapter. Professor Frisbee will offer a graduate seminar in accounting principles.

UNIVERSITY OF COLORADO

Professor G. G. Fullerton has been elected president of the Denver chapter of N.A.C.A. for the coming year.

UNIVERSITY OF ILLINOIS

Assistant Professor Kenneth L. Smith has joined the staff of the Federal Power Commission, Denver, Colorado. Assistant professor W. F. Frese has been engaged by the United States Treasury Department to assist in the reorganization of the Department's accounting system. Dr. J. W. McMahan has been appointed assistant professor of accounting in Allegheny College.

R. L. Rosbe will join the accounting staff as assistant professor. Mr. Rosbe has been a member of the Chicago staff of Price, Waterhouse and Co.

The June commencement saw the graduation of the first person with a Ph.D. in accountancy. The graduate enrollment in the Ph.D. program is given below:

Third year students	8
Second year students	13
First year students	31
	—
Total	52

INDIANA UNIVERSITY

Professor A. L. Prickett has been elected president of the Indianapolis chapter of N.A.C.A. for the coming year. Professor R. E. Walden is returning to full time teaching of accounting after a year's duties as director of student personnel and placement. Professor R. M. Mikesell, who spent a leave of absence during the past year at Northwestern University in study and research, will rejoin the staff this Fall.

UNIVERSITY OF KANSAS

J. Bland Pope, instructor in accounting, is entering private accounting practice and will continue work toward the Ph.D. degree. Lawrence Vance, formerly of Peat, Marwick, Mitchell, and Co., and the University of Minnesota, will join the staff as an instructor.

LOUISIANA STATE UNIVERSITY

Professor Justine Mendelsohn will return from, a year's leave of absence. Mr. Karl T. Devine who has been studying at the University of Michigan, will be an instructor in accounting. Dr. Daniel Borth has been appointed auditor of the University, and will continue to teach classes in cost accounting and auditing.

MIAMI UNIVERSITY

Mr. C. R. Niswonger, assistant professor, is returning after a year of graduate study at Ohio State University.

MONTANA STATE UNIVERSITY

Dean Line is continuing his duties as organizer of the Montana Merchants' Association. Professor Ralph Yuill is leaving the University.

UNIVERSITY OF OKLAHOMA

Edmund Berrigan, professor of accounting and former head of the department of accounting, passed away on July 18. Professor Berrigan's teaching career embraced a span of sixty years. His affiliation with the university began in 1913, and since 1934, when he reached the age of seventy, he had been carrying a part-time teaching schedule.

UNIVERSITY OF TEXAS

Professor F. F. Tannery is returning after a year's work on the financial organization of the state of Rhode Island. Dr. John Arch White has been advanced to the rank of associate professor.

NORTHWESTERN UNIVERSITY

Professor David Himmelblau will be absent on leave for the school year, 1939-1940. Professor Ernest C. Davies is returning after a year's leave. Professor Davies was associated with Arthur Anderson & Co. and Wolf & Co. during the year of his leave.

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